Appliance Standards Awareness Project

December 30, 2024

Holly Tapani
Product Manager ENERGY STAR HVAC
U.S. Environmental Protection Agency
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

RE: ENERGY STAR® Room Air Conditioners Draft 1 v6.0 and v7.0 Specifications

Dear Ms. Tapani,

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP) on the Room Air Conditioners Draft 1 v6.0 and 7.0 Specifications was released on November 26, 2024. We appreciate the opportunity to comment.

We support the proposed ENERGY STAR specifications for room air conditioners. The current specification, v5.0, published in February 2023 specifies minimum CEER (Combined Energy Efficiency Ratio) requirements for all room air conditioner product classes. In the draft v6.0 specification, which would be required for ENERGY STAR certification in late 2025,[1] EPA proposes to retain the current CEER requirements while adding heating efficiency requirements for reverse cycle equipment. EPA has proposed a heating energy efficiency ratio (HEER)–a seasonal efficiency metric–minimum requirement for room heat pump Types 1 through 4. In addition, EPA is proposing to establish minimum coefficient of performance (COP) requirements at 17 °F for Type 3 and at 5 °F for Type 4, as well as heating capacity maintenance requirements. EPA has estimated that for the most common size room heat pump, electricity savings in heating mode would be 276 kWh to 783 kWh annually, depending on the heat pump type, compared to electric resistance heating equipment.

For v7.0, which would be required for ENERGY STAR certification beginning on the compliance date of the updated DOE minimum efficiency standards–May 26, 2026–EPA has proposed to raise the CEER requirements to levels reflecting efficiency improvements of 10% and 5% relative to the updated DOE standards for non-reverse cycle and reverse cycle equipment, respectively. We tentatively think this level of recognition makes sense, but encourage EPA to monitor the marketplace to determine if any product classes should have more stringent minimum cooling efficiency requirements. We also support the proposed increases in the HEER and COP minimum requirements for v7.0; as EPA notes, products that

[1] EPA plans to finalize the v6.0 specification in January 2025 with certification required 9 months after.

are designed to meet higher cooling efficiency requirements will likely have associated higher heating efficiencies.

We encourage ENERGY STAR to introduce labeling requirements for room heat pumps to aid purchasers in making appropriate equipment selections in the growing room heat pump marketplace. In v7.0, EPA also solicited comments on potential labeling of room heat pumps to graphically depict the room heat pump type. While room heat pumps have been on the market for several years, the introduction of the classification of heat pump types based upon operating temperature range and the existence of active defrost in the July 2024 test procedure has generated an opportunity for ENERGY STAR to provide guidance to purchasers of this equipment. Because selecting appropriate equipment is important for consumer satisfaction and for encouraging the use of heat pump operation at lower temperatures (which will lower operating costs compared to resistance equipment), we think that labeling is valuable. However, we encourage EPA to consider implementing labeling in v6.0 so that consumers have access to this information when the heating efficiency requirements are introduced. In addition, we think that EPA's idea of indicating the operating temperature ranges corresponding to heat pump types 1 through 4 graphically (e.g. with a thermometer) makes sense because it would help make the information more easily understandable.

Thank you for considering these comments.

Sincerely,

Rachel Margolis
Senior Technical Advocacy Associate
Appliance Standards Awareness Project