

Room Air Cleaner Version 2.0 Draft 1 Specification Comment Response Document

Topic	Stakeholder Comment	EPA Response
Scope & Definitions	<p>One stakeholder recommended that EPA amend the definition of Room Air Cleaner by replacing "particulate matter" with "pollutants" to indicate the flexibility and functionality of air cleaners to match today's demands, particularly with volatile organic compounds (VOCs).</p> <p>Three stakeholders supported EPA's updated definitions and are pleased to see that the Version 2.0 scope will be referenced in the Unit Shipment Data form.</p>	<p>EPA contacted this stakeholder who noted that after further examination, they would suggest maintaining the existing definition for Room Air Cleaners with the term 'particulate matter'. As a result, EPA retained the definition in order to be consistent with the definition in the ANSI/AHAM AC-1-2015 standard.</p> <p>EPA will include a reference to the scope of this specification in the unit shipment data form for 2019.</p>
Product Reporting	<p>Three stakeholders urged EPA to consider adding reporting requirements for efficiency technologies, such as DC motors and network connectivity, to help inform future specification revisions particularly with determinations of the savings potential of demand response programs.</p>	<p>EPA will require the reporting of network capability and filter model identification to the Qualified Product List.</p> <p>Since stakeholders noted that it would be beneficial to understand the impacts a DC motor may have on efficiency, EPA plans to include educational material on motor type on the ENERGY STAR Room Air Cleaners consumer page.</p>
Contaminant Type	<p>Two stakeholders supported changing CADR requirements to be based on smoke instead of dust.</p>	<p>EPA appreciates these stakeholder comments.</p>
CADR Bins	<p>Three stakeholders were pleased with the adoption of different sized bins for CADR that reflect inherent differences in efficiency associated with size. However, they recommended that EPA consider combining the two large-CADR size bins to better reflect market sales data and simplicity.</p>	<p>EPA has combined the two largest size bins that have the same criteria for simplicity.</p>
Efficiency & Performance	<p>One stakeholder cautioned that the change in metric from Dust CADR/W to Smoke CADR/W and the proposed higher CADR/W criteria will both increase the stringency of the ENERGY STAR requirement. The stakeholder recommended EPA reconsider the proposed CADR/W level for the smallest CADR bin.</p> <p>One stakeholder did not foresee any issues complying with the proposed efficiency levels. Three other stakeholders noted the discrepancy of models available vs. models sold creates some risk, but they also support EPA's proposed CADR/W level of 2.1 CADR/W for the smallest CADR bin (30-100 CADR).</p> <p>One stakeholder cautioned that targeting the top 25% tier of models may only represent a small portion of total shipments.</p>	<p>EPA reduced the CADR/W for the smallest size bin. EPA heard stakeholder feedback indicating that the Smoke CADR/W criteria for the lowest size bin may cause products sold at a lower price point to be unable to meet the ENERGY STAR criteria. As a result, the label may not be a valuable tool for consumers looking for smaller and less expensive air cleaners. Due to this feedback and because the lowest size bin had the smallest product pass rate in the Draft 1 data package, EPA reduced the Minimum Smoke CADR/W from 2.1 to 1.9. This change has increased the pass rate in the lowest size bin.</p> <p>As noted in the ENERGY STAR Guiding Principles, experience has shown that it is typically possible to achieve the necessary balance among the key principles of the program by selecting efficiency levels reflective of the top 25% of models available on the market when the specification goes into effect. These principles include ensuring national energy savings, maintaining product performance, reasonable payback period for consumers, and effectively differentiating products for consumers with the ENERGY STAR label.</p>

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<p>Partial-On Mode Power</p>	<p>One stakeholder emphasized the need to use the IEC 62301 test method to measure standby power. They also recommended that all models that have Wi-Fi network connection capabilities, have Wi-Fi network connection enabled during testing, and thus receive the Partial-On Mode Network Connected power allowance.</p> <p>This stakeholder noted that restricting the standby power for non-networked room air cleaners may impede functionality by (1) negatively affecting any automatic function including those required by sensors to operate and by (2) diminishing the impact of particulate VOC sensors. Another stakeholder preferred maintaining the standby power consumption at a minimum of 2 Watts, regardless of the product having Wi-Fi capability or not.</p> <p>Three stakeholders supported lowering the partial on mode power requirement, while providing an allowance for Wi-Fi network connectivity, in consideration of the potential for other energy saving benefits. They also supported lowering the partial on mode power allowance to 1 Watt from 2 Watts for non-networked products.</p>	<p>EPA will continue to require the IEC 62301 test method be used to measure partial on mode power. EPA updated the requirements to note that all products with Wi-Fi capability should be tested with it enabled, and as a result, all products with this functionality will be able to claim the Partial On network connected power allowance. EPA also updated the guidance for properly configuring a network connection to ensure that the test is repeatable.</p> <p>EPA believes that reducing the partial on mode criteria for non-networked products while offering a network connected allowance, will encourage efficiency in partial on mode while not penalizing products that offer a networking feature. Certification data shows that 1 Watt is very feasible to achieve. If stakeholders have data to demonstrate that non-networked products require additional power in partial on mode, EPA would encourage submission of that information.</p>
<p>Most Efficient</p>	<p>Three stakeholders recommended room air cleaners be included as an ENERGY STAR Most Efficient product category to create additional recognition for top performing products. The stakeholders presented data that showed many products being sold are twice as efficient than the proposed levels for the Version 2.0 specification.</p>	<p>In 2020, EPA will focus on increasing market adoption of models that are certified to the new ENERGY STAR requirements. EPA will monitor the market response and assess additional steps that are needed to drive efficiency in this category in the future.</p>
<p>Test Procedure</p>	<p>One stakeholder supported updating the test method reference to ANSI/AHAM AC-1-2015 without deviation. They noted the AHAM AC-1-2019 test method will be published soon and when it is, it will be provided to EPA and DOE.</p>	<p>EPA has referenced the 2015 test method in the Draft 1 and this Final Draft specification and noted that EPA plans to reference the 2019 test method after it is published and reviewed.</p>
<p>Timeline</p>	<p>One stakeholder requested an extension in the duration from the date when the Version 2.0 specification is made final and its effective date. This stakeholder requested clarification regarding the circumstances when products would need to be retested.</p> <p>Three stakeholders suggested clearly communicating the specification change to retailers soon to avoid consumers being pushed towards larger units.</p>	<p>Partner's certification bodies will ultimately determine which products will need to be retested as a part of the process to certify products to the Version 2.0. EPA believes that products with network capability will need to be retested and recertified. Products tested to ANSI/AHAM already have the appropriate Smoke CADR/W data and may just need to be recertified, without being retested.</p> <p>EPA has communicated the room air cleaner specification revision to relevant retailers. Retailers are included in the distribution list for each mailing that EPA releases pertaining to this specification development effort.</p>