

Final Draft Version 3.0 Imaging Equipment Specification and Test Method Comment Summary

Topic	Subtopic	Comment	Response
Definitions	Professional Products	<p>Stakeholders made the following recommendations regarding the professional imaging equipment test method:</p> <ul style="list-style-type: none"> - Clarify whether accessories are included in the 180 kg weight limit; - Clarify what is included in the definition of memory; - Clarify whether saddle stitch stapling is included in the binding requirement; - Reduce the number of optional professional product criteria required for monochrome products to 4 (due to inapplicability of the color certification criterion); - Use power outlet specifications to differentiate professional products; and - Add an optional criterion for printing on SRA3 or longer than 19" paper. 	<p>Although some edits were made, EPA has not made changes to the definition such as:</p> <ul style="list-style-type: none"> - Identifying professional products based on their power connector; or - Changing the paper size to SRA3 or 19" long. <p>EPA is concerned that power connector requirements could "lock in" particular energy consumption performance in professional products, similar to an input power requirement, while changing the paper size could alter the balance of products that are included in either the professional or office categories. EPA proposes to leave these more substantive issues to Version 4.0 so they can be more fully vetted by stakeholders.</p>
International Marketing		<p>One stakeholder requested clarification about certifying products for sale in Europe now that the EU is no longer an ENERGY STAR partner.</p>	<p>The EU agreement with ENERGY STAR has lapsed and the ENERGY STAR program is no longer referenced in the EU or EFTA. There is still a formal agreement with Switzerland for products that are sold in the US/Canada and Switzerland. Products that are sold globally and meet the ENERGY STAR requirements may utilize the mark regardless of where the product is sold, but any literature that is exclusively for a particular market that is not a partner with ENERGY STAR should not carry the mark.</p>
Professional Product Requirements	DFEs	<p>One stakeholder requested clarification whether Professional DFE energy consumption can be excluded from that of the Professional Imaging Equipment.</p>	<p>EPA has clarified that Professional DFE energy consumption can be excluded.</p>
Professional Product Requirements	Duplexing	<p>Two stakeholders noted identical captions for the professional imaging equipment duplexing requirements (Tables 9 and 10), while one stakeholder noted that the tables are unnecessary because of professional products' high speeds, and should be replaced with the following requirement:</p> <p>"For all Professional Imaging Products, automatic duplexing capability shall be present at the time of purchase. Professional Imaging Products whose intended function is to print on special single-sided media for the purpose of single sided printing (e.g. release coated paper for labels, direct thermal media, etc.) are exempt from 3.4.2."</p>	<p>Since all professional imaging products are high-speed and shall meet the duplexing requirement, EPA has simplified this section by removing the tables.</p>
Professional Product Requirements	General	<p>One stakeholder expressed support for retaining Version 2.0 requirements for Professional Imaging Products, as this provides continuity.</p>	<p>EPA thanks the stakeholder for their support.</p>

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Professional Product Requirements	Rounding	One stakeholder commented that the rounding requirement for Professional Imaging Product TEC reporting should be clarified to "rounded to the nearest 0.1kWh".	EPA has clarified the rounding language in Table 9 (formerly Table 11) as well as Table 6.
Re-Testing	CB Calculator	One stakeholder commented that a calculator to help CBs recertify products to Version 3.0 would be helpful and requested further information about its release.	EPA has included a calculator with the Final specification.
Re-Testing	General	One stakeholder requested that products be re-certified to Version 3.0 without retesting to reduce burden. The stakeholder also requested that nominal (rather than tested) default delay times to sleep be allowed to be used.	As the test method has not changed significantly from Version 2.0, EPA does not expect the need to re-test most products, though that remains at the certification body's discretion. In addition, according to Third Party Certification Directive 2011-05, nominal values may be used as long as they 1) meet the ENERGY STAR specification and 2) are more conservative (longer) than tested values.
Re-Testing	Professional Products	One stakeholder commented that the Sep-2014 test method be used for testing professional imaging products, for further consistency with Version 2.0.	EPA proposes to reference the new (Dec-2018) TEC test method for professional imaging products. Referencing the current, Sep-2014 test method would provide more continuity for existing products, and the latest changes do not affect professional imaging products (DC power, connection order for products without Ethernet, elimination of instructions for fax machines and copiers). However, the revised test method provides clarification to variable names and markets for certification which could make testing certification clearer for new products.
Scope	Three-phase products	One stakeholder requested that three-phase products be included in scope to extend ENERGY STAR labeling to all Professional Imaging Products.	EPA has added this item to the list for consideration in a future revision so that it may be fully vetted by the Agency and stakeholders.
TEC Requirements	Duplexing	One stakeholder commented that duplexing only be required for TEC products at speeds greater than 19 ipm for color and greater than 24 ipm for mono, to harmonize with Blue Angel, and further requested that "enabled by default" be clarified to "the default setting shall be 'duplex printing'".	EPA has made this revision for consistency with Blue Angel.
TEC Requirements	Paper Assumptions	One stakeholder commented that the paper usage reduction in Version 3.0 is not representative of high-speed printing. A factor of 2 reduction would be more realistic.	EPA based the revised usage profile on manufacturer data and is hesitant to change it absent any additional data. However, the Agency is open to reconsidering this issue in a future specification, and welcomes any further data in the meantime.

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TEC Requirements	Recovery Time	Three stakeholders requested clarifications to the Recovery Time requirements table, while one stakeholder commented that faster products should be subjected to a longer recovery time, as they print larger jobs for which recovery time is not as important.	EPA has clarified the table, and has revised the recovery time requirement to allow recovery times that are greater than or <u>equal to</u> the Maximum Recovery Time, tR_MAX. Finally, EPA has clarified that products with longer delay times than in Table 7 are not subject to a requirement. EPA has also added an example to clarify. EPA, however, has not changed the requirement in order to continue harmonizing with Blue Angel, consistent with the draft specifications.
TEC Requirements	Rounding	Three stakeholders requested clarifications to the TEC equation rounding requirements.	EPA has clarified that the new TEC metric shall be rounded to 0.01 kWh for reporting.
TEC Requirements	Variable Names	One stakeholder requested minor changes to variable names for consistency. Specifically: - Use of TEC_MAX and TEC_REQ; - Use of TEC_2018 instead of t_SLEEP.	EPA has made the first two requested changes and removed the table footnote that contained t_SLEEP instead of t_DEFAULT but was otherwise redundant.
TEC Requirements	Wi-Fi Enabled	One stakeholder requested clarification whether the Wi-Fi adder allowance applies if products switch off the Wi-Fi when connected to Ethernet or if Wi-Fi is enabled by default.	EPA wishes to clarify that the allowance does not apply to Wi-Fi Direct, which is not expected to be enabled by default. Otherwise, any edge Wi-Fi device can receive the allowance unless Wi-Fi is 1) not enabled as shipped and 2) the user is not prompted to enable Wi-Fi upon first use. For example, the following cases shall receive the allowance: - User manually disables when using Ethernet; - Equipment disables automatically when Ethernet cord plugged in; and - Wi-Fi stays on even when Ethernet cord plugged in.
Verification Testing	Test Variability	One stakeholder requested a tolerance on verification testing due to the stringent requirements and up to 10% tolerance in other efficiency programs.	EPA has considered variability when developing the final requirements and will not be providing a further tolerance.
International Marketing		One stakeholder noted that the requirement in Section 5.1.B.2)d) to use "test results that qualified the product in another market using other size of paper" appears to be in conflict with Section 4.3.1 of the specification, which states "Products shall be tested for certification at the relevant input voltage/frequency combination for each market . . ."	EPA and DOE have removed the phrase "by making use of test results that qualified the product in another market using other size of paper (e.g., A4 versus 8.5" x 11"). The rest of the requirement retains its meaning without conflicting with the tables of paper sizes or Section 4.3.1 of the specification.

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TEC Test Method	Recovery Time	Two stakeholders commented that the current measurement of Active 0 time used for meeting the recovery time requirement is not repeatable because it is not always clear when a product is in Ready State (e.g., may still be performing startup activities). Both stakeholders recommended allowing the printing of one output image, while another recommended removing the recovery time requirement from verification testing.	EPA has not included any changes in the final test method. While the Agency can see some value in the approach, this could result in retesting across all products. In addition, this change appears to be too significant to not get further feedback from all stakeholders.
TEC Test Method	Paper Specifications	One stakeholder requested combining paper sizes for various markets to reduce the total number of tests required for worldwide certification.	EPA understands that the differences are small between paper sizes. However, the addition of Taiwan was noted in response to stakeholder feedback over multiple drafts. As such, EPA has retained the requirements in the final test method, but is open to considering this change with the next revision.
TEC Test Method	Sleep Time	Two stakeholders requested that the sleep measurement time be specified consistently in Tables 8 and 9 of the test method.	EPA and DOE have updated the language to read "for 1 hour" to provide further clarification. EPA and DOE note that the only time this duration would be under 1 hour is if the unit has an Auto-off mode, which is why Table 9 retains ≤ 1 hour.
TEC Test Method	Variable Names	One stakeholder requested that t_DEFAULT and t_SLEEP be used consistently in Tables 8 and 9 of the test method.	The tables appear to use the correct (new) variable names. EPA has removed the note beneath Table 3 that referred to the old variable names.
Partner Commitments		One stakeholder inquired whether there have been any changes to the Partner Commitments, such as changes to the RoHS requirements, labeling, or logo use outside the United States.	EPA has reviewed the RoHS requirements that will be in effect in 2019 and has included the relevant updates in the partner commitments. there have been no further changes to the partner commitments.
Future Specification Revision		One stakeholder inquired about the status of a future revision (either Version 3.1 or 4.0) and whether it would affect Professional or Non-Professional Imaging Products.	While the primary intent of a future revision would be to address professional products, the scope will depend on the state of the market at the time of the revision.
Laboratory Accreditation		One stakeholder requested that EPA "not require laboratories to update their Scopes of Accreditation when an ENERGY STAR specification is revised" to avoid confusion and reduce burden.	The referenced test procedure has not changed significantly so laboratories do not need to be re-accredited for ENERGY STAR imaging equipment.