

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

August 14, 2017

Dear ENERGY STAR® Imaging Equipment Partner or Other Interested Stakeholder,

As part of the process to update the ENERGY STAR specification for imaging equipment, the U.S. Environmental Protection Agency (EPA) is releasing the Draft 1 ENERGY STAR Imaging Equipment Test Method. This draft addresses multiple areas of interest related to testing imaging equipment, as outlined in the discussion document released on February 22, 2017. These areas included network activity, maintenance modes, paper use assumptions, and Wi-Fi connection priority. After considering stakeholder feedback in response to the discussion document, EPA is proposing the below updates to the test method and paper use assumptions.

Product Speed for Calculations and Reporting

After comparing the print speeds reported by manufacturers in test reports and the specifications online with the ENERGY STAR dataset, EPA is proposing to require testing print speed in accordance with international standards (ISO/IEC standards). EPA believes that this will promote further consistency in manufacturer declarations.

Wi-Fi Connection Priority

EPA has updated the list of network connections so that Wi-Fi takes priority over USB. This change reflects the protocol's increased popularity in consumer imaging equipment.

Network Activity

The purpose of this new section of the test method is to measure any avoidable changes to sleep mode power caused by network activity. EPA proposes testing the behavior of sleeping imaging equipment, when subjected to network packets typical of an office network. EPA worked with partners to identify packets that are typically sent by network equipment and programs running on servers and that are used for network and device management. Of 27 packet types reviewed, EPA chose Simple Network Management Protocol (SNMP) and NetBIOS Name Service (NBNS) packets, as these are common types to which imaging equipment should be able to respond without waking up. EPA specifically excluded protocols which cause unavoidable wake-ups as well as protocols that do not require an imaging equipment response. By testing for these transitions, the TEC test method will be more representative of real-life conditions for networked products.

Paper Use Assumptions

EPA received data regarding paper use from multiple stakeholders and based on the data presented, EPA is proposing to change the use assumptions in the TEC section of the specification to better align with the data provided. This reflects that as the speed of imaging equipment has increased, the total amount of paper consumed has remained flat. However, rather than modifying the jobs-per-day or images-per-job assumptions, EPA is proposing to adjust the Daily Job Energy equation in the TEC section of the Eligibility Criteria within the specification. Specifically, EPA proposes to multiply the test results by a new factor of $\frac{1}{4}$ in addition to the jobs per day calculated in the test method. This will allow TEC to simply be re-calculated without the need for new testing. EPA is proposing to revise Table 11 in the Test Method: Number of Images per Day Calculated for Product Speeds, from 1 to 100 ipm to reflect the changed assumption. This approach allows for the same end result, but without changing the underlying test method.

Comment Submittal

EPA welcomes stakeholder input on the attached Draft 1 Test Method. Stakeholders are encouraged to submit any comments to imagingequipment@energystar.gov by September 11, 2017. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

Stakeholder Webinar

EPA will host a webinar to answer any questions on the draft test method on **August 24, 2017 from 12-2 PM Eastern Time**. Please register [here](#) if you plan on attending.

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Specifications and meeting materials will be distributed via email and posted on the ENERGY STAR website. To track EPA's progress on this specification, please visit the product development website at www.energystar.gov/revisedspecs and navigate to "Imaging Equipment."

Please contact me at Fogle.Ryan@epa.gov or 202-343-9153 or Matt Malinowski, ICF, at Matt.Malinowski@icf.com or (202) 862-2693 with questions or concerns. For any other imaging equipment related questions, please contact imagingequipment@energystar.gov. Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Ryan Fogle
EPA Manager, ENERGY STAR for IT and Data Center Products

Enclosures:
Draft 1 Imaging Equipment Test Method