

# Comments on ENERGY STAR Imaging Equipment Version 3.0 Test method Discussion document

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JBMIA Printer/MFD Technology WG  
JBMIA Digital Duplicator Group  
JEITA Printer Energy Saving WG

<Overall comment>

We object against such test method changes due to introduction of network activity test, reconsideration of paper usage assumptions and so on. Changing a number of test methods requires considerable time to study including verification. There seems to be no room for such a heavy work in the current schedule to release drafts of new test method and eligibility criteria Ver. 3.0 in April to May 2017.

<Reply to the EPA' questions with comments>

No1-7 :

We object against any test condition change in conjunction with network activity. It is assumed in the TEC calculation that sleep mode power consumption occurs during night and holiday, where PC's in the office are switched off and there is no signal transmission over network. We deem that the current test method enables the measurement of correct sleep power consumption.

If network traffic matters and the number of connected PC's should be increased, its target should be the influence over the power measurement of Job1 to Job4, where the imaging equipment conducts its primary function during office work hours. Such a new test method needs a detailed study including how to influence UUT during 15 minute-measurement period.

Also three proposals of test method revision need respective verification, which requires considerable time. The time frame of one to two months is by far too short for such a study in detail. As we recall the history of Ver. 2.0 development, it took one and a half year for the investigation to implement comparatively minor changes for the test method of Ver. 2.0. The currently proposed changes would surely impact the test method much more significantly. Thus a time span of one to two months is too short to release

drafts of the new test method and the new criteria Ver. 3.0.

No8 :

We object against the change of assumed number of print jobs.

In the first place there is no reliable data regarding product speed and paper consumption. In this situation we cannot start investigation. Although a data has been presented, which shows a slight decrease of paper production volume, we cannot say that this leads to decrease of print volume. Recently environmental improvements have been implemented to the imaging equipment year by year. For example, duplex printing is getting popular these days, which will reduce paper usage by half without decreasing print volume.

This test method provides a measure to compare power consumption of devices. For that purpose the current paper usage assumption has no problem. Even if the condition of paper usage should be changed, the acquired ranking of power consumption of devices in question would not be changed.

No9 :

We don't have data regarding product speed and paper usage.

No10 :

We have no idea other than the current approach to reflect the precondition of paper usage in the eligibility criteria.

No11 :

Maintenance mode differs considerably among products of different manufacturers. There is no data available for typical maintenance mode.

Additionally we know of no products, which conduct maintenance mode so frequently as is depicted in the discussion paper.

No12-13 :

We agree with the proposed removal of the definition for "Standby", because it contributes to eradicate ambiguous provisions from ENERGY STAR specification. However, we disagree with the EPA's proposal to change only the name "Standby" to "Lowest Power Consumption" and to keep the content of definitions without any change. It is described in 1.C.4 that "Standby" Mode may correspond to Ready State or Sleep Mode. This is a strange sentence, as we do not believe that Ready or Sleep should

represent Lowest Power Consumption. In case of Imaging Equipment “Off” mode is the “Lowest Power Consumption” mode.

Thus, we propose to change 1.C.4 and 3.4.5 as follows;

(With this change, the same name “Off” comes to appear in 1.C.2 and 1.C.4. These two items should be combined to make a new 1.C.2 “Off” mode, which defines not only how this mode is reached but also its power consumption characteristics.)

1.C.4. Off: The lowest power consumption state which cannot be influenced by the user and that may persist for an indefinite time when the product is connected to the main electricity supply and used in accordance with the manufacturer’s instructions.

For Imaging Equipment products addressed by this specification the “Off” Mode is the product’s minimum power state.

3.4.5 Off Power Consumption: Off Mode power shall be less than or equal to the Maximum Off Power specified in Table 9, subject to the following condition.

i. The Imaging Equipment shall meet the Off Power requirement independent of the state of any other devices (e.g. a host PC) connected to it.

No14 :

We deem that the proposed criteria can differentiate professional products from office products.

However, we object against the exclusion of professional products in Ver. 3.0.

In order to exclude relevant products, the definition of professional products must be fixed in the first place, which would not be materialized at the starting point of Ver. 3.0, Currently there are ENERGY STAR products, which seem to match the proposed criteria. If Ver. 3.0 should exclude these products, they could not pass EPEAT, as EPEAT requires ENERGY STAR registration, This would be a hazard for such products. Adjustment is also necessary with the legislator/administrator of EPEAT.

No15 :

Our industrial associations do not have duty cycle data of professional products.

If the EPA needs such data, please ask directly to relevant manufacturers.

No16 :

ISO/DIS 20690 is referenced as a test method of professional products. However, this standard focuses on energy efficiency during continuous printing and does not capture

such overall electric energy consumption as TEC.

Instead, ISO/CD 21632 is currently under development, which determines comprehensive energy consumption of digital printing devices. The editor of this standard happens to be a member of JBMIA. Therefore, even if this standard cannot be published before Ver. 3.0 effective date, it is possible to establish the definition and criteria of professional products along with the development of ISO 21632. In this respect we think we can cooperate with the EPA as much as possible.

No17 :

No comment.

No18 :

3D printer is completely different from conventional imaging equipment for office. It should be investigated as a different category.

No19 :

We agree with exclusion of stand-alone copiers from the scope.

However, we object against exclusion of digital duplicator from the scope.

See the reason of our objection as follows;

- Digital duplicators have a high energy-saving performance (low TEC value). If excluded from the scope, there is a risk that users think DD is inferior to other printing method and DD sales might be significantly affected. As to DD product technology improvement under development, print speed is to be improved without increasing TEC value and power consumption during waiting mode to be reduced, etc.
- EPEAT qualification is required for the procurement of products by the domestic institutions of the US government. Since EPEAT requires ENERGY STAR registration, if DD is excluded from the ES scope, DD products cannot acquire EPEAT qualification. This is unreasonable.

No20 :

ENERGY STAR is the most famous energy-saving criteria in the world. It is different from EPEAT or environmental label specified by ISO 14020. There are a number of environmental labels, which adopt/refer to ENERGY STAR. If ENERGY STAR should step into the area to waste reduction and sustainability, conflicts may arise between ENERGY STAR and other environmental labels.

Thus, ENERGY STAR should not include such an environmental specification as ink/toner refill.

No21 :

No comment.