

Canon comments on ENERGY STAR “Proposed Modifications to the Test Method” and related materials

Section	Current draft text	Proposed amendments <i>(Shown in italic, red font)</i>	Reasons of our proposals
<p>Presentation at the stakeholder meeting held in April 13, 2011; “ES_Imaging_Equipment_Kickoff_Webinar_Presentation.pdf” Slide 9</p>	<ul style="list-style-type: none"> - Final Version 2.0 Specification :Q4 2011 - Version 2.0 Specification Effective :Q3 2012 	<p><u>We would like to propose to set transition period at least for 1 year after publication of the final version 2.0 Specification before entering into effect.</u> (i.e., if the version 2.0 specification is finalized in Q4 2011, the effective date should be in Q4 2012.)</p>	<p>The current proposals for version 2.0 include many technically challenging changes for manufacturers, such as reducing primary functional adder allowances and deleting secondary functional adder allowances for OM. Manufacturers must carry a technical review and newly design products to meet the new specifications. It will take at least 1 year, so the new products may not be released in time according to current proposed timeline. In such case, many models which are qualified current Energy Star ver.1.2 may become non-qualified ones, because Energy Star doesn’t allow any grandfathering. This may cause confusion in information for customers’ purchase plan. In order to avoid such inconvenient situation for customers, we believe at least 1 year of transition period should be set.</p>

Section	Current draft text	Proposed amendments <i>(Shown in italic, red font)</i>	Reasons of our proposals
<p>Cover Memo Page 1,2 of 3 <u>Functional Adders for Operational Mode (OM) Products</u></p>	<p>Recognizing recent advancements in the energy efficiency of imaging products, EPA proposes eliminating allowances for secondary functional adders and revising down the allowances for primary functional adders.</p>	<p>About deletion of secondary functional adder allowances for OM: <u>We believe that secondary functional adder allowances should not be deleted.</u></p>	<p>Generally speaking, electric power is loaded on multi-functional products during “sleep” according to their functions equipped. The secondary functional adder allowances have been set in order to supplement power value to cover such functions.</p> <p>If those are deleted, less functional products which have not made use of secondary functional adders would become easier to earn Energy Star than multi-functional products which have made use of them for their multi functions do. In such situation, the difference between qualified/non-qualified models comes simply from number of equipped functions rather than from its energy efficiency. This doesn’t seem to meet the purpose of Energy Star, and as the result, it may cause misunderstanding among users as if EPA recommends single-functional products.</p> <p>In order to take power consumption in multi-functional products into consideration, we believe that secondary functional adder allowances should not be deleted.</p>

Section	Current draft text	Proposed amendments <i>(Shown in italic, red font)</i>	Reasons of our proposals
Cover Memo Pages 1-2 of 3 <u>Functional Adders for Operational Mode (OM) Products</u> Table 1.	D. Wireless LAN Current Sleep Allowance (W) :3.0 Proposed Sleep Allowance (W) :0.5	Proposed Sleep Allowance (W) : <i>1.6 W</i>	Attached Table 2 shows comparison of power consumption between cases where wireless LAN is valid / invalid in Canon IJ printers. According to the Table 2, using wireless LAN inevitably consumes electric power up to 1.6 W in current state of technology. In considering current technical situation, we would like to propose higher allowance of 1.6W than that proposed in the memo.
Draft Test Method Page 2 of 17 3 TEST SETUP B) <u>Ac Input Power:</u> 2)	If a product is designed to operate at a voltage/frequency combination in a specific market that is different from the voltage/frequency combination for that market (e.g., 230 volts (V), 60 hertz (Hz) in North America), the manufacturer should test the product at the regional combination that most closely matches the product's design capabilities and note this fact on the test reporting sheet.	2) If a product is designed to operate at a voltage/frequency combination in a specific market that is different from the voltage/frequency combination for that market (e.g., 230 volts (V), 60 hertz (Hz) in North America), the manufacturer should test the product at the <i>rated voltage / frequency combination that matches</i> the product's design capabilities and note this fact on the test reporting sheet.	We believe that a product should be tested at the rated voltage/frequency combination designated by the product's spec so that power consumption would be precisely measured. For example, there are other voltage/frequency combinations of 200 V/60 Hz and 200V/50 Hz in Japan, and some products are designed for these combinations. It may bring inaccurate test results if such products are tested and assessed by using "most close" combination of 230 volts (V), 50 hertz (Hz) in Europe. Instead, testing at the rated voltage/frequency should be allowed so that such products would be properly tested.

Section	Current draft text	Proposed amendments <i>(Shown in italic, red font)</i>	Reasons of our proposals
<p>Draft Test Method Page 4 of 17 4 PRE-TEST UUT CONFIGURATION FOR ALL PRODUCTS 4.1 General Configuration A) Product Speed for Calculations and Reporting 3)</p>	<p>For non-Continuous Form products, with the exception of mailing machines, the product speed shall be calculated per Table 5. If the maximum claimed speeds differ when producing images on A4 or 8.5" x 11" paper, the higher of the two shall be used.</p>	<p>We would like to propose to delete the 2nd sentence of 4.1. A) 3): <i># the maximum claimed speeds differ when producing images on A4 or 8.5" x 11" paper, the higher of the two shall be used.</i></p>	<p>The 2nd sentence seems to be redundant and inconsistent with 3.I), because paper specifications in the test have been already specified depending on the market in Table 4 "Paper size and weight requirements". The print speed should be calculated at the paper size designated in Table 4.</p>
<p>Draft Test Method Page 5 of 17 4 PRE-TEST UUT CONFIGURATION FOR ALL PRODUCTS 4.1 General Configuration C) <u>Network Connections</u> 1)</p>	<p>Products shall be connected to only one network or data connection for the duration of the test.</p>	<p>Products shall be connected to <i>i) only one network or data connection; or</i> <i>ii) two connections both via wireless LAN and via USB</i> for the duration of the test.</p>	<p>Ink jet printers are mainly used in private household rather than in the office, and USB is the most common interface used to connect a PC and a printer. As a common way of use, such printers often do print jobs sent from another PC set in other room via wireless LAN , while keeping USB connection to the first PC. To take such way of use into consideration, we believe that simultaneous two connections via wireless LAN and via USB should be also allowed.</p>

Section	Current draft text	Proposed amendments <i>(Shown in italic, red font)</i>	Reasons of our proposals
<p>Draft Test Method Page 6 of 17</p> <p>4 PRE-TEST UUT CONFIGURATION FOR ALL PRODUCTS</p> <p>4.1 General Configuration</p> <p>C) <u>Network Connections</u></p> <p>2)</p> <p>Table 6</p>	<p>Connections for Standard-format Ink Jet and Impact Printers and MFDs</p> <ol style="list-style-type: none"> 1. Ethernet - 1 Gb/s 2. Ethernet - 100 Mb/s 3. USB 3.x 4. USB 2.x 5. USB 1.x 6. RS232 7. IEE1284 8. Wi-Fi 	<p>Connections for Standard-format Ink Jet and Impact Printers and MFDs</p> <ol style="list-style-type: none"> 1. <i>USB 3.x</i> 2. <i>USB 2.x</i> 3. <i>USB 1.x</i> 4. <i>Wi-Fi</i> 5. <i>Ethernet - 1 Gb/s</i> 6. <i>Ethernet - 100 Mb/s</i> 7. RS232 8. IEE1284 	<p>Ink jet printers are mainly used in private household rather than in the office, and USB is the most common interface used to connect a PC and a printer. So manufacturers equip most of their ink jet printer models with USB interface.</p> <p>Attached Table 1 shows the list of interfaces equipped on ink jet printers of Canon. According to the Table 1, Ethernet is not so common as interface for ink jet printers, and the ranking of frequency in use is firstly USB, next Wi-Fi, then Ethernet, as we propose.</p> <p>Compliance to specification should be assured at the most common condition of connection which users often use, also for one of the purposes of Ver.2.0, that is, increasing unification of data set in the test method.</p> <p>Therefore, we believe that the most popular USB should take precedence in connections for ink jet printers.</p>