Draft Commission communication in the framework of the implementation of Commission Regulation (EU) No XX/YY implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for servers and data storage products

Publication of titles and references of transitional methods of measurement and calculation for the implementation of Commission Regulation (EU) No XX/YY implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for servers and data storage products

1. References

Servers

Parameter	Source	Reference Test Method / Title	Notes
Server efficiency, server performance and server power demand in active state	ETSI	EN 303 470:2018	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz).
Idle state power (Pidle)	ETSI	EN 303 470:2018	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz).
Maximum power	ETSI	EN 303 470:2018	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz). Maximum power is the highest measured power demand reported by SERT testing under any single workload and load level.
Power Supply Efficiency	EPRI and Ecova	Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.7	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz) Initiatives specifying requirements for this parameter include: • 80 Plus programme (EPRI and Ecova) • Ecodesign Regulation (EU) No.617/2013
Power Supply Power Factor	EPRI and Ecova	Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz)

Parameter	Source	Reference Test Method / Title	Notes
		Dc Power Supplies Revision 6.7	Initiatives specifying requirements for this parameter include: • 80 Plus programme (EPRI and Ecova) • Ecodesign Regulation (EU) No.617/2013
Operating condition class		The manufacturer has to declare the product operating condition class: A1, A2, A3 or A4. The unit under test is placed at a temperature corresponding to the highest allowable temperature for the specific operating condition class (A1, A2, A3 or A4), which the model is declared to be compliant with. The unit should be tested with SERT (Server Efficiency Rating Tool) and run test cycle(s) for a duration of 16 hours. The unit shall be considered to comply with the declared operating condition, if SERT reports valid results (i.e. if the unit under test is in its operational state for the whole duration of the 16 hours test)	A method for measuring temperatures during testing is provided in: • CENELEC EN 50564:2011 Electrical and electronic household and office equipment. Measurement of low power consumption
Secure deletion of data	NIST	Guidelines for Media Sanitization[1], NIST Special Publication 800-88 - Revision 1	Other initiatives specifying requirements for this parameter include: • CPA Security Characteristics for Data Sanitisation - Flash Based Storage • CPA Security Characteristic Overwriting Tools for Magnetic Media Version 2.1 • CAS Sanitisation Requirements Version 2.0 Nov 2014 • CESG - HMG IA Standard No. 5 - Secure Sanitisation Version 5.0

[1] http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-88r1.pdf

Parameter	Source	Reference Test Method / Title	Notes
Disassembly		Not available	There are no specific test methods for testing this aspect but initiatives specifying requirements for this parameter for ICT equipment include: • JRC Report "Study for a method to assess the ease of disassembly of electrical and electronic equipment"[2], May 2016 • COMMISSION DECISION of 9 June 2011 on establishing the ecological criteria for the award of the EU Ecolabel for personal computers • COMMISSION DECISION of XXX establishing the ecological criteria for the award of the EU Ecolabel for personal, notebook and tablet computers (January 2016) • European Community Directive (2012/19/EU) - The Waste Electrical and Electronic Equipment Directive (WEEE Directive) • Article 15: Information for treatment facilities" requirements of the EU WEEE Directive (2012/19/EU). • Draft NSF 426 Servers / IEEE 1680.4 (and 1680.1 Computers) Furthermore, relevant information at horizontal level (i.e. non product-specific) is present in the standards under development (in particular the prEN 45554) in the framework of mandate M543 on material efficiency[3].
Critical raw material (CRM) content		Not available	There are no specific test methods for testing this aspect but initiatives specifying requirements for this parameter for ICT equipment include: • Draft NSF 426 Servers / IEEE 1680.4 • IEC 62474. Furthermore, relevant information at horizontal level (i.e. non product-specific) is present in the standards under development (in particular the prEN 45558) in the framework of mandate M543 on material efficiency[3].

[2] http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101479/lb-na-27921-en-n.pdf

[3] http://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.detail&id=564

Data storage products

Parameter	Source	Reference/Title	Notes
Power Supply Efficiency	EPRI and Ecova	Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.7	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz) Initiatives specifying requirements for this parameter include: • 80 Plus programme (EPRI and Ecova) • Ecodesign Regulation (EU) No.617/2013
Power Supply Power Factor	EPRI and Ecova	Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.7	Testing should be conducted at an appropriate EU voltage and frequency (e.g. 230v, 50Hz) Initiatives specifying requirements for this parameter include: • 80 Plus programme (EPRI and Ecova) • Ecodesign Regulation (EU) No.617/2013
Operating condition class		The manufacturer has to declare the product operating condition class: A1, A2, A3 or A4. The unit under test is placed at a temperature corresponding to the highest allowable temperature for the specific operating condition class (A1, A2, A3 or A4), which the model is declared to be compliant with. The unit should be tested with SNIA Emerald Power Efficiency Measurement Specification and run test cycle(s) for a duration of 16 hours. The unit shall be considered to comply with the declared operating condition, if SNIA Emerald Power Efficiency Measurement Specification reports valid results for the whole duration of the test (i.e. if the unit under test is in its operational state for the whole duration of the 16 hours test).	• SNIA Emerald Power Efficiency Measurement Specification Version 2.0.2: Section 7.3 General Requirements and Definitions and Section 7.4.3: Active Test A method for measuring temperatures during testing is provided in: • CENELEC EN 50564:2011 Electrical and electronic household and office equipment. Measurement of low power consumption

Parameter	Source	Reference/Title	Notes
Secure deletion of data	NIST	Guidelines for Media Sanitization[1], NIST Special Publication 800-88 - Revision 1	Other initiatives specifying requirements for this parameter include: • CPA Security Characteristics for Data Sanitisation - Flash Based Storage • CPA Security Characteristic Overwriting Tools for Magnetic Media Version 2.1 • CAS Sanitisation Requirements Version 2.0 Nov 2014 • CESG - HMG IA Standard No. 5 - Secure Sanitisation Version 5.0
Disassembly		Not available	There are no specific test methods for testing this aspect but initiatives specifying requirements for this parameter for ICT equipment include: • JRC Report "Study for a method to assess the ease of disassembly of electrical and electronic equipment"[4], May 2016 • COMMISSION DECISION of 9 June 2011 on establishing the ecological criteria for the award of the EU Ecolabel for personal computers • COMMISSION DECISION of XXX establishing the ecological criteria for the award of the EU Ecolabel for personal, notebook and tablet computers (January 2016) • European Community Directive (2012/19/EU) - The Waste Electrical and Electronic Equipment Directive (WEEE Directive) • Article 15: Information for treatment facilities" requirements of the EU WEEE Directive (2012/19/EU). • Draft NSF 426 Servers / IEEE 1680.4 (and 1680.1 Computers) Furthermore, relevant information at horizontal level (i.e. non product-specific) is present in the standards under development (in particular the prEN 45554) in the framework of mandate M543 on material efficiency[5].

[4] http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101479/lb-na-27921-en-n.pdf

Parameter	Source	Reference/Title	Notes
Critical raw material (CRM) content		Not available	There are no specific test methods for testing this aspect but initiatives specifying requirements for this parameter for ICT equipment include: • Draft NSF 426 Servers / IEEE 1680.4 • IEC 62474. Furthermore, relevant information at horizontal level (i.e. non product-specific) is present in the standards under development (in particular the prEN 45558) in the framework of mandate M543 on material efficiency[3].

[5] http://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.detail&id=564