

Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P14.

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Company name *	Lenovo	
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Additional information	The latest version of this document can be found at	
	http://www.lenovo.com/social_responsibility/us/en/datasheets_r	notebooks.html

The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.					
Type of product *	Notebook				
Commercial name *	Lenovo G40-80				
Model number *	80E4; 80JE; 80KY				
Issue date *	2015-01-13				
Intended market *	🔀 Global 📃 Europe 📃 Asia, Pacific & Japan 📃 Americas 📃 Other				
Additional information					

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality	Control	Requireme	nt met
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	\boxtimes	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality contro such as organized by IT-Företagen (see www.itecodeclaration.org).	l 🔀	

Model number *	80E4; 80JE; 80KY		
Issue date *	2015-01-13	Logo	lenovo

Product	environmental attributes - Legal requirements	Require	ment	met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)	I, 🔀		
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	\square		
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	\boxtimes		
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🛛		
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			\square
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			\square
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.			\boxtimes
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm ² /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/materials.html	\boxtimes		
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)	\boxtimes		
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\square		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medica or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).			\boxtimes
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).		
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).	\boxtimes		
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\boxtimes		
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			\square
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\boxtimes
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium an hexavalent chromium by weight of these together.	d 🔀		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	\square		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	al 🔀		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model nu	mber *	80E4; 80JE; 80KY			
Issue dat	:e *	2015-01-13 Logo	lena	DVO .	
Dueduet		wantal attributes. Markat requirements. Environmental conscious design			
		mental attributes - Market requirements - Environmental conscious design I tory to fill in. Additional information regarding each item may be found under P14.	Require Yes	No	
Item P6		nt information	Tes	INU	n.a.
P6.1*		on for recyclers/treatment facilities is available (see legal reference).			
P7	Design				
P7.1*	Parts tha	mbly, recycling t have to be treated separately are easily separable			
P7.2*		aterials in covers/housing have no surface coating.			
P7.3*		arts >100g consist of one material or of easily separable materials.			
P7.4*		arts >25g have material codes according to ISO 11469 referring ISO 1043.		Ħ	
P7.5	-	arts are free from metal inlays or have inlays that can be removed with commonly available tools.		Ħ	
P7.6*	Labels a	e easily separable. (This requirement does not apply to safety/regulatory labels).		Ē	
	Product	lifetime			
P7.7*	Upgradin	g can be done e.g. with processor, memory, cards or drives	\square		
P7.8*	Upgradin	g can be done using commonly available tools	\boxtimes		
P7.9.	Spare pa	rts are available after end of production for: 5 years			
P7.10	Service is	s available after end of production for: 5 years			
		and substance requirements			
P7.11*		cover/housing material type: type: >PC+ABS-FR(40)< Material type: >PC+ABS-TD15-FR(40)< Material type: >PC+AB (TD+MD)15FR(40)<	S-		
P7.12	Electrica	I cable insulation materials of power cables are PVC free.		\bowtie	
P7.13	Electrica	cable insulation materials of signal cables are PVC free			
P7.14	All cover	/housing plastic parts >25g are free from chlorine and bromine.			
P7.15	All printe Note B2)	d circuit boards (without components) >25g are halogen free. as defined in IEC61249-2-21. (See			
P7.16	,	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:	\boxtimes		
P7.17	Alt. 1 Chemica	I specifications of flame retardants in printed circuit boards >25g (without components): additive) □, TBBPA (reactive) Ⅹ, Other; chemical name: Brominated Epoxy Resin, CAS #:			
	Chemica	I specifications of flame retardants in printed circuit boards (without components) >25g according 3-4: <i>FR(16)</i>			
P7.18	concentra	etarded plastic parts >25g contain the following flame retardant substances/preparations ir ations above 0.1%:	n 🗌		
	1. Chemi 2. Chemi	ent: No legal limits exist, this is a market requirement. cal name: <i>YGN5151RFL</i> , CAS #: <i>confidential</i> cal name: <i>YGN5001RFD</i> , CAS #: <i>confidential</i> cal name: <i>ER5151RFL</i> ,, CAS #: <i>confidential</i>			
	FR(40)	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:	\boxtimes		
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, 6, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	\square		
P7.20		lastic parts' weight >25g, recycled material content is 2.6%.			
P7.21		lastic parts' weight >25g, biobased material content is 0%.			
P7.22		rces are free from mercury y is used specify: Number of lamps: and max. mercury content per lamp: mg	\boxtimes		
P8	Batteries				
P8.1*		hemical composition: <i>LI-ION</i>			
P8.2	-	meet the requirements of the following voluntary program/s: US RBRC			

Annex B of ECMA-370 4th edition, June 2009

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model number *	80E4;	80JE; 80K	Y			
Issue date *	2015-01-13				Logo	lenovo
Product environm	nental attri	butes - Market I	equirements (c	continued)		Requirement me
Item						Yes No n.
	consumptio					
	1	bllowing power leve				
Energy mode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard for en method *	ergy modes and test
Peak (On-max)		65 W	65 W	65 W	Full load	
Category 0	·					
Short Idle State - W	/OL Enabled	W	W	W	Use for ENERGY STAR V6	registration (P _{idle})
Long Idle State - W	OL Enabled	W	W	W	Use for ENERGY STAR V6	registration (P _{idle})
Sleep (S3) - WOL E	nabled	W	W	W	Use for ENERGY STAR V6	registration(P _{sleep})
Sleep (S3) - WOL D	isabled	W	W	W	Reference	
Off (S5) - WOL Ena	bled	W	W	W	Use for ENERGY STAR V6	registration(P _{off})
Off (S5) - WOL Disa		W	W	W	Use for EuP	
Category I1						
Short Idle State - W	Ol Enabled	7.758 W	7.809 W	8.385 W	Use for ENERGY STAR V6	registration(P)
Long Idle State - W			4.386 W	4.859 W	Use for ENERGY STAR V6	
		4.576VV 0.608 W	4.386 W		Use for ENERGY STAR V6	
Sleep (S3) - WOL E				0.875W		
Sleep (S3) - WOL D		0.606 W	0.624 W	0.873 W	Reference	
Off (S5) - WOL Ena		0.238 W	0.257 W	0.259 W	Use for ENERGY STAR V6	registration(P _{off})
Off (S5) - WOL Disa	abled	0.237 W	0.255 W	0.257 W	Use for EuP	
EPS No-load (External power sup plugged in the wall o disconnected from the	utlet but	0.065 W	0.067 W	0.069 W		
PTEC * Typical Energy Cons	sumption	W	W	W		
TEC * Typical Energy Cons	sumption	kWh/week	kWh/week	kWh/week		
ETEC *		26.77	26.84	29.53	$E_{TEC} = (8760/1000) \times (P_{off} \times 1000)$	$0.25 + P_{class} \times 0.35$
Annual Energy Cons	sumption	kWh/year	kWh/year	kWh/year	+ P _{long_ldle} x 0.10+ P _{short_ldle})	
			i) - WOL Enabled; I	P _{sleep} : Sleep Mode	(S3) - WOL Enabled; P _{idle} : Idle S	State - WOL Enabled
Display resolution*	: 1366*768 N	legapixels				L
Print Speed *	: Im	ages per minute				
Default time to enter	energy save	mode: 30 minutes				
P9.2* Informat	ion about the	energy save funct	ion is provided wit	th the product.	1	
	Y STAR® ve	e energy requirem rsion: Version 6.0			gram/s: Product category: <mark>/1</mark>	
P10 Emissio						
P10.1 Mode		eclared according t de description	o ISO 9296	Declared	Declared A-	weighted
				A-weighted sound power level L_{WAd} (d sound pressure level B) Operator position X Desktop X	3
Idle	*	HDD:Idle		* 2.68	21.3	
Operatio		HDD: Operating		* 2.69	21.9	
Operation Other me		A		2.09 N/A	21.s N/A	
	ed according		ECMA-74			
	5	Other	-	vered by ECMA-	74 with L _{pAm} measurement dis	stance m)

P10.2 The product meets the acoustic noise requirements of the following voluntary program/s:	
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Model nu	mber *	80E4; 80JE; 80KY80E4; 80JE; 80KY				
Issue date *		2015-01-13	Logo	leno	10	
Product	Product environmental attributes - Market requirements (continued)					met
Item				Yes	No	n.a.
itoini	Chemic	al emissions from printing products		100	110	
P10.3*		formed according to ECMA-328 (ISO/IEC 28360) standard , other specify:				\square
P10.4		emission rate (print phase) is (mg/h):				
1 10.4		Dust Ozone Styrene Benzene TVOC				
P10.5		Il emission requirements of the following voluntary program/s are met for				\mathbf{X}
		Dust Ozone Styrene Benzene	TVOC			
	Electron	nagnetic emissions				
P10.6		er display meets the requirement for low frequency electromagnetic fields of the foll	owing voluntary	\square		
	program					
P11		able materials for printing products				
P11.1*		Data Sheet (SDS) is available for the ink/toner preparation, even if not legally requ	, ,			\boxtimes
P11.2*	EN1228		e requirements o	of		
P11.3*	2-sided (duplex) printing/copying is an integrated product function.				\boxtimes
P12		nics for computing products				
P12.1*	The disp	lay meets the ergonomic requirements of ISO 9241-307 for visual display technology	gies.		\boxtimes	
P12.2*	The phys	sical input device meets the requirements of ISO 9995 and ISO 9241-410.			\boxtimes	
P13		ng and documentation				
P13.1*		packaging material type(s): CARTON weight (kg): 0.295				
		packaging material type(s): CUSHION weight (kg): 0.085				
P13.2*		packaging material type(s): PAPER PAD weight (kg): 0.030 plastic packaging is free from PVC.		\square		
P13.3*		nedia for user and product documentation (tick box):				<u> </u>
F 13.5		ic \square , Paper \square , Other \square				
P13.4*	For pape fiber: 1	er user and product documentation, please specify contained percentage of post-co	nsumer recycled			
P14	Additior	nal information (See Note B4)				
	informati knowled	Supplier makes no representations, guarantees, assurances or warranties whether on contained in this document. All information provided by supplier in this documer ge available at the time of completion, and supplier shall have no obligation to upda here is constrained, and arguided for informational purposes only. See a bases	It is provided base Ite such information	ed on supp on. The inf	olier's ormat	ion
	provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.					
P9	See Ene	rgy Star Qualified Notebooks & Tablet Computers for the latest information: ww.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup	o&pgw_code=CO			

Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

Lenovo ErP Lot3 Information Sheet - PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	Lenovo G40-80	Logo
Model Number	80E4; 80JE; 80KY 80E4; 80JE; 80KY	_
Issue Date	2015-01-13	lenovo
Additional information		

P7.1.1 Proc	duct environmental attributes	
(d) y	ear of manufacture:	2014
	TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics card lisabled and if the system is tested with switchable graphics mode with UMA driving the display:	ls (dGfx) are
c	Category (according to ErP Lot 3): A Etec: 18.44	
	ETEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics card enabled:	s (dGfx) are
c	Category (according to ErP Lot 3): B Etec: 18.50	
(g) io	dle state power demand (Watts);	6.35
(h) s	leep mode power demand (Watts);	0.62
(i) s	leep mode with WOL enabled power demand (Watts) (where enabled);	N/A
(j) o	ff mode power demand (Watts);	0.24
(k) o	ff mode with WOL enabled power demand (Watts) (where enabled);	N/A
(I) ir	nternal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):	
1	0% 20% 50% 100% Average	
(m) e	external power supply efficiency (if applicable):	
A	Average*: 45W:87.58%,87.60%,88.32%; 65W:89.18%,89.04%,89.92%	
*i	internal note: show values for all available external power supplies	
(o) tł	he minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300CYCLES
	he measurement methodology used to determine information mentioned in points (I) - internal PSU	
e	fficiency: NA	
	he measurement methodology used to determine information mentioned in points (m) - external PSU	
e	fficiency: Measuring the Energy Consumption of External Power Supplies, Appendix Z to 10 CFR Part 430.	
	he measurement methodology used to determine information mentioned in points (o) – loadingcycles patteries:	
	IEC 61960 measurement methodology	

(p-4)		easurement methodology used to determine information mentioned in maximum, idle, sleep, off mode r as defined in Point P9.1 in the Product IT Eco Declaration:				
		ENERGY S	TAR Te	st Method for Computers, Rev. Aug-2010		
(q)	sequence	of steps for achievin	g a stab	le condition with respect to power demand::		
				t until the operating system has fully loaded. If necessary, run the d allow all preliminary file indexing and other one-time/periodic processes to complete.		
(r)	description of how sleep and/or off mode was selected or programmed:					
	refer to power management, sleep mode: ACPI system level G1/S3 (suspend to RAM) state; off mode: ACPI system level G2/S5 ('soft off') state					
(S)	sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:					
		refer to pow	er mana	gement, 30mins automatically reaches sleep mode		
(t)	the duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes): 25					
(u)	the length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes): NA					
(v)	the length of time before the display sleep mode is set to activate after user inactivity (in minutes):				10	
(w)	information on the energy-saving potential of power management functionality:					
				refer to user manual		
(x)	user inforr	nation on how to ena	able the	power management functionality:		
				refer to user manual		
(z)	test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:					
				0Hz, Total Harmonic Distortion <2 %		
	Notebook B	attery Information:		This notebook computer is expected by better first that serve the	ad and replaced	
Yes (Battery	not user		n/a	This notebook computer is operated by battery/ies that cannot be access by a non-professional user.	·	
replaceab	ne)	replaceable)		The battery[ies] in this product cannot be easily replace themselves	eu by users	

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