

ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2015)

Annex B2 - Product environmental attributes Notebooks and Tablets

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	Lenovo	Logo			
Company name *	Lenovo				
Contact information *	Lenovo Global Environmental Affairs	Lenovo			
e-mail address	Alvin L Carter				
	alcarter@lenovo.com				
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Additional information	The latest version of this document can be found at:				
	http://www.lenovo.com/ecodeclaration				

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 *	IdeaPad L340-15 Gaming				
Model number *	81LK				
Issue date *	2019-3-28				
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.

About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template: P4.1 – P4.3 Consumable materials P9.1 TEC and Print speed P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products.

Issue da			-			
	te *	2019-3-28		Leng		Эти
Product	environ	mental attributes - Legal requirements		Require		t met
Item				Yes	No	n.a.
P1		ous substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	\bowtie		
P1.2*	Commer	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\square		
P1.3*	hydrobro trichloroe	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachl ethane, methyl bromide (see legal reference). Comment: Legal reference has no m ration values.				
P1.4*	terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychl rl (PCT) in preparations (see legal reference).		\boxtimes		
P1.5*		do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carb ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in th	e 🔀		
P1.6*	(see lega	th direct and prolonged skin contact do not release nickel in concentrations above 0 al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	,5 μg/cm²/wee	k 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail o ww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):			
P2	Batterie					
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with to Information on proper disposal is provided in user manual. (See legal reference)	he disposal	\boxtimes		
P2.2*	Batteries reference	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm e)	ium. (See lega	ıl 🖂		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		\boxtimes		
P3	Conform	nity verification & Eco design (ErP)				
P3.1*	The proc The Dec	Juct is CE-marked to show conformance with applicable legal requirements (see leg laration of Conformity can be requested at (add link or e-mail address): www.lenvo.com/us/en/compliance/eu-doc	al reference).			
P3.2*	The proc	duct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes		
	Require	d information is; given in item P15 or added to this document,		\boxtimes		
	•	available at (add URL): <i>lenovo.com/us/en/compliance/ec</i>	o-declaration			
P5	Product	packaging	2.0010101011			
P5.1*	Packagii	ing and packaging components do not contain more than 0,01% lead, mercury ant chromium by weight of these together.	v, cadmium ar	nd 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of e legal reference).	of the material(s) 🔀		
P5.3*	The proc (see lega	luct packaging material is free from ozone depleting substances as specified in the M al reference). nt: Legal reference has no maximum concentration values.	Iontreal Protoc	ol 🔀		
P6		nt information				
P6.1*		on for recyclers/treatment facilities is available (see legal reference).				

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *		Error! Reference source not found.	Logo			
Issue da	te *	2019-3-28		Len		DTH
Product		mental attributes - Market requirements (See General NOTE GN	below)			
		onmental conscious design		Require		
Item P7		tory to fill in. Additional information regarding each item may be found under P14. Disassembly, recycling		Yes	No	n.a.
P7.1*	0 /	t have to be treated separately are easily separable				
P7.2*		naterials in covers/housing have no surface coating.				╞
P7.3*		arts > 100 g consist of one material or of easily separable materials.				╞
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			H	H
P7.5	•	arts are free from metal inlays or have inlays that can be removed with commonly	available tools.		Ħ	Ħ
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).			Ħ	Ħ
	Product lifetime					
P7.7*	Upgradir	ng can be done e.g. with processor, memory, cards or drives		\square		
P7.8*	Upgradir	ng can be done using commonly available tools				
P7.9	Spare pa	arts are available after end of production for: 5 years				
P7.10	Service i	s available after end of production for: 5 years				
		and substance requirements				
P7.11*	Material	cover/housing material type (e.g. plastics, metal, aluminum): type: >PC+ABS-FR(40)< Material type: >PC+ABS-TD15FR(40)<				
P7.12		n materials of external electrical cables are PVC free.			\square	
P7.13		n materials of internal electrical cables are PVC free.		\square		
P7.14	weight (´ polyvinyl	plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flam chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i in 25% post-consumer recycled content.	e retardants, a	nd		
P7.15	Printed c as define	ircuit boards, PCBs (without components) are low halogen: all 🔀 PCBs > 25 g 🔀 ad in IEC 61249-2-21. (See 1NOTE B2)	are low halog	en 🔀		
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4		\boxtimes		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c PA (additive), TBBPA (reactive) (See NOTE B3), Other: <i>Brominated Epoxy</i> 8-7				
	<u>Alt. 2: Ch</u> accordin	nemical specifications of flame retardants in printed circuit boards (without compon g ISO 1043-4: <i>FR(16)</i>	ents) > 25 g	\square		
P7.18	<u>Alt. 1:</u> Fl concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: <i>FR2021</i> ,, CAS #: <i>confidential</i> (See NOTE B4) ical name: <i>NH-1150</i> , CAS #: <i>confidential</i> " ical name: <i>ER5151RFL</i> , CAS #: <i>confidential</i>	es/preparations	in 🔀		
	<u>Alt. 2: </u> Cł	nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4: FR(40)			
P7.19		: parts > 25 g, flame retardant substances/preparations above 0,1% are used whic I the following Risk phrases; <i>confidential</i> and Hazard statements: <i>confidential</i>	h have been			
			See note B5)			
P7.20*	lfYES;a a) Oft ape or	sumer recycled plastic material content is used in the product (See Note B6): t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conter ercentage of total plastic by weight) is 0.417%.	nt (calculated as	5		

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number *	81LK	Logo	
Issue date *	2019-3-28		LEIIOVO

Product environmental attributes - Market requirements (continued)

Item

Requirement met Yes No n.a.

P7.21*		stance requirements ((continued) in the product (See N0		
F1.21					
	,	c parts' weight > 25 g,	s below shall be answe the biobased plastic m	ered; aterial content (calculat	ed as a percentage of
	or b) The weight of	f the biobased plastic n	naterial is a		
P7.22*			naterial is g. less than 0,1 mg/lamp.		
		specify: Number of lan		um mercury content per	
P8	Batteries				
P8.1*	Battery chemical c	omposition: LI-ION, Li	thium-Metal		
P9		tion (See NOTE B8)			
P9.1	For the product the		s or energy consumption	ons are reported:	
Energy mod	de *	Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference/Standard for energy modes and test method *
Peak (On-r	max)	135 W	135 W	135 W	Full load
Category	/	2	2	2	
Short Idle Enabled	State - WOL	6.03W	5.98W	6.25W	Use for ENERGY STAR V7.1 registration (P _{idle})
Long Idle S Enabled	State - WOL	4.11 W	3.84 W	3.87 W	Use for ENERGY STAR V7.1 registration (P _{idle})
Sleep (S3) - WOL Enabled		0.58 W	0.60 W	0.60 W	Use for ENERGY STAR V7.1 registration (P _{sleep})
Sleep (S3)	- WOL Disabled	0.56 W	0.57 W	0.60 W	Use for ENERGY STAR V7.1 registration (P _{sleep})
Off (S5) - V	VOL Enabled	0.32 W	0.31 W	0.34 W	Use for ENERGY STAR V7.1 registration (Poff)
Off (S5) - V	VOL Disabled	0.31 W	0.31 W	0.32 W	Use for ErP
EPS No-loa	ad	0.106W	0.105 W	0.106 W	
PTEC * Typical Ene	ergy Consumption	W	W	W	
ETEC *		21.93	21.60	22.40	E _{TEC} = (8760/1000) x (P _{off} x 0.25
Annual Ene	ergy Consumption	kWh/year	kWh/year	kWh/year	+ P _{sleep} x 0.35 + P _{long_ldle} x 0.10+ P _{short_ldle} x 0.30)
		Poff: Off Mode(S5) - WC	DL Enabled; P _{sleep} : Sleep	Mode(S3) - WOL Enabled	d; P _{idle} : Idle State - WOL Enabled
External Po	wer Supply Efficien	cy Level (International	Efficiency Marking Pro	otocol) * : VI	
Display res	olution * : 1920*108	80 megapixels			
Default time	e to enter energy sa	ive mode: 30 minutes			H
P9.2*			on is provided with the	product.	
P9.3		class (monitors only):			
P10	Emissions				
1 10		Declared according to	ISO 9296 (See NOTE	B9)	
P10.1		Node description			A-weighted sound power level, <i>L</i> _{WA,c} (B)
	Idle *	HDD:Idle		* NA	
	Operation *	Operating (HDD)		* 2.8	
	Other mode	Operating (CPU) ODD :Operating		* 3.5 NA	
	Other mode	eclared A-weighted sound	d pressure level (dB) $L_{p Am}$	(operator pos	ition desktop – operating)
		ng to: 🔀 ISO 7779 🔀	ECMA-74		· · · · ·
		Other	(only if not covered by	EUMA-14	

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available; see <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

Model nu	mber *	81LK					Logo				
lssue dat	e *	2019-3-28						Le	eno	VO	м
Product	environ	nental attribut	es - Market requiren	nents (cor	ntinued)			Re	quire	ment	met
Item									Yes	No	n.a.
		nagnetic emissi									
P10.4			the requirement for lov AC adapter only)	v frequency	electromagnetic f	ields of the	following vo	oluntary			
P12		mics for compu									
P12.1*	The disp	play meets the er	gonomic requirements o	f ISO 9241-	307 for visual displ	lay technolo	gies.		\square		
P12.2*	The phy	sical input device	e meets the requirements	s of ISO 999	95 and ISO 9241-4	10.			\boxtimes		
P13	Packagi	ing and docume	entation								
P13.1*	Product	packaging mater packaging mater packaging mater		weight (ko weight (ko weight (ko	g): 0.084						
P13.2*	Product	plastic primary p	ackaging is free from PV	/C.					\boxtimes		
P13.3*		duct primary cor er recovered fibe	rugated fiberboard pack r content: 100 %	kaging, spe	cify the contained	percentage	of minimu	m post-			
P13.4*		media for user ar ronic, 🔀Paper,	nd product documentatic	on (tick box)	:						
P13.5	Úser an		is item if paper documer entation on paper media								
	-	hlorine-free al chlorine-free									
		ed chlorine-free									
P14	Volunta	ry programs									
P14.1			equirements of the follow	ring voluntar	ry program(s):						
	ENERG Eco-labe Eco-labe		Criteria version: 7.1 Criteria version: Criteria version:	1	Date: 2019-3-28 Date: Date:	Product of Product of Product of	•••				
P15	Additio	nal information	(See NOTE B10)								
P9			specific configuration	n may vary;	description of th	e tested pro	oduct confi	guration:			
	NOTE: S informat knowled	Supplier makes n ion contained in t ge available at th I here is approxir	o representations, guara this document. All inform the time of completion, ar nate and provided for inf	antees, assunation providend	irances or warranti led by supplier in t shall have no obliga	ies whether his documer ation to upda	express or i nt is provide ate such info	mplied, re d based o ormation.	egarding on supp The inf	lier's ormat	ion
P9	See Ene	ergy Star Qualifie	d Notebooks & Tablet C v/index.cfm?fuseaction=				code=CO				

NOTE B10 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 B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

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	IdeaPad L340-15IRH Gaming	Logo
Model Number	81LK	
Issue Date	2019-3-28	Lenovo
Additional information		

P7.1.1	Product environmental attributes					
(d)	Year of manufacture:				2019	
(e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are	
(f)	Etec value (kWh) per ErP Lot 3 Categor enable	y and capability adjust	ments applied when a	II discrete graphics o	cards (dGfx) are	
		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)	
	Memory over base [GB]			20		
lents sting	Additional internal storage	(Yes / No)	(Yes / No)	<mark>yes</mark> (Yes / No)	(Yes / No)	
capability adjustments applied during testing	Discrete television tuner	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)	
ability a	Discrete Audio Card	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)	
cap app	Discrete graphics Card(s) [number / #]	(Yes / No)	#: (Yes / No)	<mark>yes #: 1</mark> (Yes / No)	#: (Yes / No)	
	Category of discrete graphics Card(s)			G6		
Test results	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)					
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled			16.08		
(g)	Idle state power demand (Watts);	·	·	·	C:5.33	
(h)	Sleep mode power demand (Watts);				C:0.45	
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		C:0.44	
(j)	Off mode power demand (Watts);				C:0.32	
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		C:0.32	
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 9	% of rated output pow	er (if applicable):		
	10% 20% 50%	100% Avera	ige			
(m)	External power supply efficiency (if appli	cable)*:				
	Average active efficiency: 89,88%,91,35	5%/				
(a)	*internal note: show values for all available external po Minimum number of loading cycles that t	ower supplies	and (analice only to a	atabaak aamautara)		
(o)					300 cycles	
(p-1)	Measurement methodology used to dete	rmine information mer NA	itioned in points (I) – ii	nternal PSU efficiency:		
(p-2)	 Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: <i>EN 50563:2011 measurement methodology</i> 					

(p-3)		dology used to determine information mentioned in p IEC 61960 measurement methodolo	pgy				
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration: EN 62623:2013 measurement methodo					
(q)	Sequence of steps for	or achieving a stable condition with respect to power EN 62623:2013 measurement methodo					
(r)	Description of how sl	eep and/or off mode was selected or programmed: EN 62623:2013 measurement methodo	blogy				
(s)	Sequence of events off mode:						
	refer to	o power management, 30mins automatically reac	hes sleep mode				
(t)		te condition before the computer automatically re- not exceed the applicable power demand requirement		30min			
(u)	Length of time after	r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	r automatically reaches a power	NA			
(v)		re the display sleep mode is set to activate after		10min			
(w)	Information on the er	nergy-saving potential of power management functio	nality:				
(x)	User information on I	refer to user manual how to enable the power management functionality:					
(z)	Test parameters for	refer to user manual measurements: — test voltage in V and frequency in	Hz — total harmonic distortion of				
(~)	the electricity supply	system, - information and documentation on the in					
	used for electrical tes	sting: 230V/50HZ, Total Harmonic Distortion	-2%				
			~270				
Additio	nal Notebook Batter						
		Battery[ies] <u>not</u> user replaceable	Battery[ies] user replaceable	n/a			
		The battery[ies] in this product cannot be easily replaced by users themselves. $^{1)}$					
Internal/	built-in Battery	\boxtimes					
External	/detachable Battery						
Bios Ba	ckup Battery						
Other:							
Addition	al information						
cymynatopha s baterías có yměnu baterí ugeren kan er Akku/die / asutajad ei s vasutajad ei s va	ara[ите] δатерия[и] в този η e este producto no pueden s ie/baterií v tomto výrobku by ikke uden videre udskifte bat Akkus dieses Produkts kann// aa selle toote akut/akusid ise (g) στο προϊόν αυτό δεν μπορ (s présente(s) dans ce produ ože lako zamijeniti Bateriju s aatterie in questo prodotto no evar nomainīt šā ražojuma a aterijos [bateriju] pats vartotoj mulátorát/akkumulátorait a fi eriji fdan il-prodott ma tistax/ i dette produktet kan ikke let in dit product is (zijn) door d e može sam w latwy sposób as deste produto não podem lie) din acest produs nu poato omto výrobku nemôže vymie v tem izdelku uporabnik jel he hep kelt för kunden att själv byta t	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu am u ovom proizvodu. n può/possono essere facilmente sostituita/e dall'utente. kumulatoru(-us). las negali lengvai pakeisti. alhasználó nem tudja egyedül egyszerűen kicserélni. jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. t erstattes av brukerne selv. e gebruiker niet gemakkelijk vervangbaar. wymienić baterii w tym produkcie. ser facilmente substituídas pelos próprios utilizadores. e (pot) fi uşor înlocuită (înlocuite) de utilizatorii înșiși. ňať používateľ. mi ne morejo zlahka zamenjati. posti käyttäjän vaihdettavissa.	verden.				