



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 * e-mail address	Lenovo Global Environmental Affairs Alvin L Carter alcarter@lenovo.com		Lenovo.
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment	.html	
Additional information	The latest version of this document can be found at:		
	http://www.lenovo.com/ecodeclaration		

	based on product specification or test results based obtained from sample testing), that the product of the given in this declaration.
Type of product *	Notebook
Commercial name *	IdeaPad L340-17 Gaming
Model number *	81LL
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.

Model nu	mber *	81LL	Logo	Land		
Issue dat	e *	2019-3-28		Lend),
Product	environ	mental attributes - Legal requirements		Require	men	met
Item				Yes	No	n.a.
P1		ous substances and preparations				
P1.1*	Products	s do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	\boxtimes		
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\boxtimes		
P1.3*	hydrobro trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach ethane, methyl bromide (see legal reference). Comment: Legal reference has no material ration values.				
P1.4*		s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych /I (PCT) in preparations (see legal reference).	lorinated	\boxtimes		
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 cart entaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in the	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/week			
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):			
P2	Batterie	s				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with t Information on proper disposal is provided in user manual. (See legal reference)	he disposal			
P2.2*	Batteries referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm e)	ium. (See legal			
P2.3*	Batteries	s and accumulators are readily removable. (See legal reference)		\boxtimes		
P3	Conform	nity verification & Eco design (ErP)				
P3.1*	The Dec	duct is CE-marked to show conformance with applicable legal requirements (see legal requirements): claration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/eu-doc	jal reference).			
P3.2*		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, available at (add URL): lenovo.com/us/en/compliance/e	co-declaration			
P5	Product	packaging				
P5.1*	Packagii	ng and packaging components do not contain more than 0,01% lead, mercury ent chromium by weight of these together.	/, cadmium an	d 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature delegal reference).	of the material(s	s) 🔀		
P5.3*	The prod	duct packaging material is free from ozone depleting substances as specified in the Nal reference). In telerence). In the control of the cont	nontreal Protoco	ol 🔀		
P6		nt information				
P6.1*	Informati	on for recyclers/treatment facilities is available (see legal reference).		\boxtimes		

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	Lonovo
Issue date *	2019-3-29		LEI IOVO"

Product	environmental attributes - Market requirements (See General NOTE GN below)			
		Require	ment	met
Item	*=mandatory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P7 P7.1*	Design, Disassembly, recycling Parts that have to be treated separately are easily separable			
				- - -
P7.2*	Plastic materials in covers/housing have no surface coating.			
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.			Щ.
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.			Щ_
P7.5	Plastic parts are free from metal inlays or have inlays that can be removed with commonly available tools.			
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).			
D7 7*	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives			Щ.
P7.8*	Upgrading can be done using commonly available tools			Щ
P7.9	Spare parts are available after end of production for: 5 years			
P7.10	Service is available after end of production for: 5 years			
D7 44*	Material and substance requirements			
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluminum): Material type: >PC+ABS-FR(40)< Material type: >PC+ABS-TD15FR(40)<			
P7.12	Material type: >PC+ABS-FR(40)< Material type: >PC+ABS-TD15FR(40)< Insulation materials of external electrical cables are PVC free.		\boxtimes	
P7.13	Insulation materials of internal electrical cables are PVC free.			
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1%		+	+
1 7.14	weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and			Ш
	polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing	3		
D7.45	more than 25% post-consumer recycled content.			
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all 🔀 PCBs > 25 g 🔀 are low halogen as defined in IEC 61249-2-21. (See 1NOTE B2)	n 🔛		Ш
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: Marking: FR(40)			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: Brominated Epoxy Resin , CAS #:	\boxtimes		
	26265-08-7		_	_
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g according ISO 1043-4: FR(16)			
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in	_		
	concentrations above 0,1%: 1. Chemical name: <i>FR2021</i> ,, CAS #: <i>confidential</i> (See NOTE B4)	\boxtimes		
	2. Chemical name: <i>NH-1150</i> , CAS #: <i>confidential</i> "			
	3. Chemical name: <i>ER5151RFL</i> , CAS #: <i>confidential</i>			
	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4: FR(40)			
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been	$\neg \neg$		H
	assigned the following Risk phrases; confidential and Hazard statements: confidential			ш
	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)			
P7.20*	Postconsumer recycled plastic material content is used in the product (See Note B6):	\boxtimes		
	If YES; at least one of the two alternatives below shall be answered;			
	a) Of total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as			
	a percentage of total plastic by weight) is 0.337%.			
	or b) The weight of recycled material is 3.4 g.			
L	b) The weight of recycled material is 3.7 g.			

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 *	81LL	Logo	Lonovo
Issue date *	2019-3-28		LEI IOVO.

		Requirement m	
Item	Yes	No	n.a.

	Material and sub	stance requirements	(continued)			
P7.21*	Biobased plastic r	material content is used	in the product (See No	OTE B7):		
	a) Of total plast total plastic t	tic parts' weight > 25 g,	es below shall be answe the biobased plastic m	,	ted as a percentage of	
	or b) The weight of	of the biobased plastic i	naterial is g.			
P7.22*	Light sources are	free from mercury, i.e.	less than 0,1 mg/lamp.			
P8	Batteries	specify: Number of lar	nps: and maximi	um mercury content pe	r lamp: mg	
P8.1*		composition: LI-ION, L	ithium-Metal			
P9	<u> </u>	otion (See NOTE B8)	and motor			
P9.1			s or energy consumption	ons are reported:		
Energy mo		Power level at	Power level at	Power level at	Reference/Standard for energy	
		100 V AC	115 V AC	230 V AC	modes and test method *	ш
Peak (On-	max)	135 W	135 W	135 W	Full load	
Categor	<u>y</u>	2	2	2		
Short Idle Enabled	State - WOL	7.30W	7.30W	7.30W	Use for ENERGY STAR V7.1 registration (P _{idle})	
Long Idle Enabled	State - WOL	4.73 W	4.23 W	4.61 W	Use for ENERGY STAR V7.1 registration (P _{idle})	
Sleep (S3)	- WOL Enabled	0.71 W	0.72 W	0.75 W	Use for ENERGY STAR V7.1 registration (P _{sleep})	
Sleep (S3)	- WOL Disabled	0.70 W	0.70 W	0.74 W	Use for ENERGY STAR V7.1 registration (P _{sleep})	
Off (S5) - I	WOL Enabled	0.40 W	0.47 W	0.43 W	Use for ENERGY STAR V7.1 registration (P _{off})	
Off (S5) - I	WOL Disabled	0.40 W	0.47 W	0.43W	Use for ErP	
EPS No-loa	ad	0.106 W	0.105 W	0.106 W		
PTEC *	ergy Consumption	W	W	W		\boxtimes
ETEC *	orgy concumpation	26.07	25.13	26.46	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$	
Annual En	ergy Consumption	kWh/year	kWh/year	kWh/year	+ P _{sleep} x 0.35 + P _{long_Idle} x 0.10+ P _{short_Idle} x 0.30)	
		Poff: Off Mode(S5) - W		Mode(S3) - WOL Enable	ed; P _{idle} : Idle State - WOL Enabled	
External Po	ower Supply Efficie		I Efficiency Marking Pro			
	solution * : 1920*10	<u> </u>		, , , , , , , , , , , , , , , , , , ,		-
		ave mode: 30 minutes				-#-
P9.2*			on is provided with the	n ro du at		- - -
			on is provided with the	product.		-
P9.3		class (monitors only):				
P10	Emissions	Dedender de la constitució	100 0000 (0 - NOTE	' DO)		
D10.1			ISO 9296 (See NOTE		t A weighted sound newer level /	(D)
P10.1	Mode I	Mode description * HDD:Idle		* NA	t A-weighted sound power level, $L_{WA,c}$	<u>(D)</u>
	Operation	* Operating (HDD) * Operating (CPU)		* 2.3 * 2.8		
	Other mode	ODD :Operating		NA		
	Other mode	Declared A-weighted soun	d pressure level (dB) $L_{p{ m Am}}$	(operator pos	sition desktop – operating)	
				1 (Speciale) pol		
	Measured accord	ing to: ISO 7779		ECMA 74)		
	I	Other	(only if not covered by	ECMA-/4)		

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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

Model nun	nber *	81LL					Logo	lono	V/0	
Issue date	*	2019-3-28						Leno	VO,	4
Product e	environn	nental attributes	- Market requirem	nents (con	tinued)			Require	ment	met
Item								Yes	No	n.a.
		nagnetic emission								
P10.4		er display meets the (s): MPR-II(3 pin At	requirement for low careful and a requir	frequency	electromagnetic fie	elds of the	following volunta	ry 🔀		
P12		nics for computing								
P12.1*	The disp	lay meets the ergon	omic requirements of	ISO 9241-3	307 for visual displa	y technolog	gies.	\boxtimes		
P12.2*	The phys	sical input device me	eets the requirements	of ISO 999	5 and ISO 9241-41	0.				
P13		ng and documenta								
P13.1*	Product	packaging material t packaging material t packaging material t	ype(s): <i>EPE</i> ype(s): <i>PE</i>	weight (kg weight (kg weight (kg): 0.084					
P13.2*	Product	plastic primary pack	aging is free from PV	C.				\boxtimes		
P13.3*		luct primary corruga er recovered fiber co	ated fiberboard packantent: 100 %	aging, spec	ify the contained p	oercentage	of minimum pos	st-		
P13.4*			roduct documentation Other	n (tick box):						
P13.5	Ùser and		em if paper document ation on paper media							
	Elementa	hlorine-free al chlorine-free ed chlorine-free								
P14	Voluntai	ry programs								
P14.1	The prod	luct meets the requi	rements of the followi	ing voluntary	y program(s):					
	ENERGY Eco-labe Eco-labe		Criteria version: 7.1 Criteria version: Criteria version:		Date: 2019-3-28 Date: Date:	Product of Product of Product of	0 ,			
P15		nal information (Se								
P9			ecific configuration							
	informati knowledg provided informati	on contained in this ge available at the ti here is approximate on.	epresentations, guara document. All informa me of completion, and e and provided for info	ation provided d supplier sl ormational p	ed by supplier in thi hall have no obligat ourposes only. See	is documer tion to upda a Lenovo <i>P</i>	nt is provided base ate such informati	ed on supp on. The inf	lier's ormati	on
P9	See Ene	rgy Star Qualified N	otebooks & Tablet Co dex.cfm?fuseaction=t				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 L340-17IRH Gaming	Logo	
Model Number	81LL		Lonovo
Issue Date	2019-3-28		Lenovo.
Additional information			

(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 Catego enable	ry and capability adjust	ments applied when a	all discrete graphics	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		
ents sting	Additional internal storage	(Yes / No)	(Yes / No)	yes (Yes / No)	(Yes / No)	
capability adjustments applied during testing	Discrete television tuner	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)	
bility a ied du	Discrete Audio Card	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)	
capa appl	Discrete graphics Card(s) [number / #]	(Yes / No)	#: (Yes / No)	yes #: 1 (Yes / No)	#: (Yes / No)	
	Category of discrete graphics Card(s)			G6		
esults	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 results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled			17.52		
g)	Idle state power demand (Watts);	1	<u> </u>	•	C:5.73	
h)	Sleep mode power demand (Watts);				C:0.47	
i)	Sleep mode with WOL enabled power d	emand (Watts) (where	enabled);		C:0.46	
j)	Off mode power demand (Watts);				C:0.39	
k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		C:0.39	
1)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 °	% of rated output pow	er (if applicable):		
	10% 20% 50%	100% Avera	ige			
m)	External power supply efficiency (if appl	icable)*:				
	Average active efficiency: 89,88%,91,3	5%/				
	*internal note: show values for all available external p	ower supplies				
0)	Minimum number of loading cycles that	the batteries can withs	tand (applies only to n	otebook computers):	300 cycles	
(p-1)	Measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: NA					
p-2)	Measurement methodology used to dete	ermine information men		external PSU efficiend	cy:	

(p-3)	(p-3) Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: **IEC 61960 measurement methodology**				
(p-4)	Measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration: EN 62623:2013 measurement methodology				
(q)	Sequence of steps for achieving a stable condition with respect to power demand: EN 62623:2013 measurement methodology				
(r)	Description of how sleep and/or off mode was selected or programmed: EN 62623:2013 measurement methodology				
(s)	off mode: refer to power management, 30mins automatically reaches sleep mode				
(t)	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): 30min			30min	
(u)	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)				10min	
(w)	Information on the energy-saving potential of power management functionality: refer to user manual				
(x)	User information on how to enable the power management functionality: refer to user manual				
(z)	the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing: 230V/50HZ, Total Harmonic Distortion<2%				
Additio	nal Notebook Batter	y Information:			
		Battery[ies] <u>not</u> user replaceable The battery[ies] in this product cannot be easily replaced by users themselves. 1)	Battery[ies] user replaceable	n/a	
Internal/built-in Battery					
External/detachable Battery					
Bios Backup Battery					
Other:					
Addition	nal information				
) bo bottor:":-	1:	asily raplaced by users themselves			

Акумулаторната[ите] батерия[и] в този продукт не може да се замени[ят] лесно от самите потребители.

Las baterías de este producto no pueden ser sustituídas fácilmente por los propios usuarios. Výměnu baterie/baterií v tomto výrobku by neměli provádět sami uživatelé.

Brugeren kan ikke uden videre udskifte batteriet/batterierne i dette produkt.

Der Akku/die Akkus dieses Produkts kann/können nicht ohne weiteres vom Benutzer selbst ausgetauscht werden.

Kasutajad ei saa selle toote akut/akusid ise hõlpsasti asendada.

Η μπαταρία[-ες] στο προϊόν αυτό δεν μπορούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες La/les batterie(s présente(s) dans ce produit ne peuvent être facilement remplacée(s) par les utilisateurs eux-mêmes. Korisnik ne može lako zamijeniti Bateriju sam u ovom proizvodu.

La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente.

Lietotāji paši nevar nomainīt šā ražojuma akumulatoru(-us). Šio gaminio baterijos [baterijų] pats vartotojas negali lengvai pakeisti.

A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni. Il-batterija/batteriji f'dan il-prodott ma tistax/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess. Batteriet [ene] i dette produktet kan ikke lett erstattes av brukerne selv.

De batterij(en) in dit product is (zijn) door de gebruiker niet gemakkelijk vervangbaar. Użytkownik nie może sam w łatwy sposób wymienić baterii w tym produkcie. A ou as baterias deste produto não podem ser facilmente substituídas pelos próprios utilizadores.

Bateria (bateriile) din acest produs nu poate (pot) fi uşor înlocuită (înlocuite) de utilizatorii înşişi. Batériu(-ie) v tomto výrobku nemôže vymieňať používateľ. Baterij/baterije v tem izdelku uporabniki sami ne morejo zlahka zamenjati.

Tämän tuotteen akku [akut] ei[vät] ole helposti käyttäjän vaihdettavissa. Det är inte enkelt för kunden att själv byta ut batteriet/batterierna. Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.