

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		
e-mail address	Alvin L Carter	Lenovo	
	alcarter@lenovo.com		
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		

	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 *	NB					
Commercial name *	Lenovo ideapad S340-15/S340-15 Touch Series					
Model number *	81N8, 81NC 81QF, 81QG, 81QS, 81QU, 81RK					
Issue date *	2018/11/27					
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 n	umber *	81N8, 81NC 81QF, 81QG, 81QS, 81QU, 81RK				
Issue date *		2018/11/27	Len	Lenovo.		
Produc	t enviror	mental attributes - Legal requirements	Require	ement	t me	
ltem			Yes	No	n.a.	
P1		ous substances and preparations				
P1.1*	Product	s do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\square			
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\boxtimes			
P1.3*		s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),	\square			
		omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-				
		ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum				
		ration values.				
P1.4*	Product terphen	\square				
P1.5*	Product	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in	the 🗙			
	chain co	ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).				
P1.6*	Parts w	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μ g/cm 2 /we	ek 🔀			
	· · · ·	al reference).				
	Comme	nt: Max limit in legal reference when tested according to EN1811:2011-5.				
P1.7*		Article 33 information about substances in articles is available at (add URL or mail contact):	\boxtimes			
	http://ww	vw.lenovo.com/social_responsibility/us/en/environment.html				
P2	Batterie	IS State of the second s				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal Information on proper disposal is provided in user manual. (See legal reference)	\square			
P2.2*	Batterie	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See leg	jal 🔀			
P2.3*		s and accumulators are readily removable. (See legal reference)	\boxtimes			
P3		nity verification & Eco design (ErP)				
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see legal reference)				
		claration of Conformity can be requested at (add link or e-mail address):				
	http://v	vww.lenovo.com/social_responsibility/us/en/ec_doc_notebooks/				
P3.2*		duct complies with the Eco design requirements for energy-related products,	\boxtimes			
		al reference).		_		
	Require	d information is; given in item P15 or added to this document,	\bowtie		\boxtimes	
		🔀 available at (add URL):				
		vww.lenovo.com/social_responsibility/us/en/datasheets_notebooks/				
P5		t packaging				
P5.1*	hexaval	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium a ent chromium by weight of these together.				
P5.2*	•	kaging materials are marked with abbreviations and numbers indicating the nature of the materia be legal reference).	l(s) 🔀			
P5.3*		duct packaging material is free from ozone depleting substances as specified in the Montreal Proto al reference).	icol 🔀			
		nt: Legal reference has no maximum concentration values.				
P6	Treatme	ent information				
P6.1*	Informat	ion 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 *		81N8, 81NC 81QF, 81QG, 81QS, 81QU, 81RK	Logo				
Issue dat	te *	2018/11/27		Len	Lenovo		
Product	t environ	mental attributes - Market requirements (See General NOTE GN	below)				
		onmental conscious design		Require		met	
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.	
P7.1*		Disassembly, recycling t have to be treated separately are easily separable					
P7.2*		laterials in covers/housing have no surface coating.				╞	
P7.3*		arts > 100 g consist of one material or of easily separable materials.				╞	
P7.4*		r = 25 g bave material codes according to ISO 11469 referring ISO 1043-4.			╞	╞	
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	available tools.		⊢⊢	╞	
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			⊢⊢	╞	
	Product						
P7.7*		g can be done e.g. with processor, memory, cards or drives		\square			
P7.8*		g can be done using commonly available tools			Ħ	Ħ	
P7.9					Ħ		
P7.10						Ħ	
	Material and substance requirements						
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum): type: AL5052 Material type: PC+ABS+15%Talc Materia	al type: PC+AB	S			
P7.12	Insulatio	n materials of external electrical cables are PVC free.			\boxtimes		
P7.13		n materials of internal electrical cables are PVC free.			\boxtimes		
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 flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i n 25% post-consumer recycled content.	e retardants, ar	nd			
P7.15		ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g ed in IEC 61249-2-21. (See 1NOTE B2)	are low haloge	en 🗌	\boxtimes		
P7.16		tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		\square			
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		\square			
		nemical specifications of flame retardants in printed circuit boards (without componing ISO 1043-4: <i>FR</i> (16)	ents) > 25 g	\square			
P7.18	concentr 1. Chemi 2. Chemi	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: Confidential , CAS #: Confidential (See NOTE B4) ical name: Confidential , CAS #: Confidential	es/preparations	in 🖂			
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4:				
P7.19		parts > 25 g, flame retardant substances/preparations above 0,1% are used which		<u> </u>	H	⊢⊢	
		the following Risk phrases; and Hazard statements:					
	The sour	ce(s) for these classifications is/are found at (add URL(s)):	See note B5)				
P7.20*	Postcons	sumer recycled plastic material content is used in the product (See Note B6):		\boxtimes			
	a) Of t a pe or	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 2.6% . weight of recycled material is 13.3 g.	nt (calculated as				

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 *	81N8, 81NC 81QF, 81QG, 81QS, 81QU, 81RK	Logo	
Issue date *	2018/11/27		Lenovo.
Product environm	nental attributes - Market requirements (continued)		Requirement met

Item

Requirement met

Yes	NO	n.a.	
			-

	Material and su	bstance requirements	(continued)					
P7.21*	Biobased plastic	material content is use	d in the product (See I	NOTE B7):				
	If YES: at least o	If YES; at least one of the two alternatives below shall be answered;						
	a) Of total plas	Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of						
		by weight) is %.						
	or b) The weight	of the biobased plastic	material is g.					
P7.22*	, ,	e free from mercury, i.e	v	0.				
		d specify: Number of la		num mercury content p	er lamp: mg			
P8	Batteries							
P8.1*		composition: Li-poly	mer					
P9		ption (See NOTE B8)	•					
P9.1		he following power leve Power level at	Power level at	tions are reported: Power level at	Deference/Standard for energy			
Energy m		100 V AC	115 V AC	230 V AC	Reference/Standard for energy modes and test method *			
Peak (On	-max)	65 W	65 W	65 W	Full load			
<u>Catego</u>	ry NB1							
Short Idle	e State - WOL	5.87 W	5.69 W	5.59 W	Use for ENERGY STAR V6			
Enabled					registration (P _{idle})			
Long Idle Enabled	State - WOL	3.9 W	3.67 W	3.78 W	Use for ENERGY STAR V6 registration (P _{idle})			
21100100								
	3) - WOL Disabled	0.52 W	0.49 W	0.56 W	Reference			
Off (S5) -	WOL Disabled	0.31 W	0.32 W	0.40 W	Use for ErP			
EPS No-lo		0.051 W	0.058 W	0.145 W				
(External power wall outlet but d	r supply / charger plugged in th lisconnected from the product.)	e						
PTEC *		W	W	W				
Typical Er	nergy Consumption		00.07 W/h /	20.50 1/1/1/1/1/1/1/2017	F = (0700/4000) + (D + 0.05			
	nergy Consumption	21.12 kWh/year	20.37 kWh/year	20.59 kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$ + $P_{sleep} \times 0.35 + P_{long_ldle} \times 0.10 + P_{short_{ldle}} \times 0.30)$			
		Poff: Off Mode(S5) - W	OL Enabled; P _{sleep} : Slee	p Mode(S3) - WOL Enabl				
External F	Power Supply Efficie	ency Level (Internationa	al Efficiency Marking P	rotocol) * : VI				
Display re	solution * : 1920*1	080 megapixels						
Default tin	ne to enter energy s	save mode: 10 minutes						
P9.2*	Information abou	t the energy save funct	ion is provided with the	e product.				
P9.3	Energy efficiency	class (monitors only):						
P10	Emissions	. , , , , , , , , , , , , , , , , , , ,						
	Noise emission	- Declared according t	o ISO 9296 (See NOT	E B9)				
P10.1		Mode description			hit A-weighted sound power level, $L_{WA,c}$ (B)			
	ldle	* Idle		* 2.7				
	Operation	* CPU Operating		* 3.8				
	Other mode	Declared A-weighted sou	nd pressure level (dB) L_{pl}	Am 17.7 (operator p	osition desktop – idle)			
	Other mode	Declared A-weighted sou	nd pressure level (dB) L_{pl}	Am 27.7 (operator p	osition desktop – operating)			
	Measured accord	ding to: 🔀 ISO 7779 🕻 Other	ECMA-74 (only if not covered b	w ECMA-74)				

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; $see \ \underline{http://www.ecma-international.org/publications/standards/Ecma-370.htm}$

Model nu	umber *	81N8, 81NC 81	QF, 81QG, 81QS, 81QL	J, 81RK			Logo				
Issue dat	te *	2018/11/27					Lenovo		тн		
Product	t environi	mental attribut	tes - Market requiren	nents (cor	ntinued)			Re	quire	ment	met
ltem									Yes	No	n.a.
		nagnetic emissi									
P10.4	Comput program		the requirement for low	frequency e	lectromagnetic	fields of the foll	owing volun	tary			\boxtimes
P12		mics for comput									
P12.1*	The disp	lay meets the er	gonomic requirements o	f ISO 9241-	307 for visual of	display technolo	gies.				\boxtimes
P12.2*	The phy	sical input device	e meets the requirements	s of ISO 999	95 and ISO 924	11-410.				\square	
P13	Packag	ng and docume	entation								
P13.1*	Product	packaging mater	ial type(s): <i>Paper pad</i> ial type(s): <i>PE Bag</i> ial type(s): <i>Carton</i>	weight (kg weight (kg weight (kg	g): 0.015						
P13.2*			ackaging is free from PV		,,				\mathbf{X}		
P13.3*		duct primary con	rugated fiberboard pack	aging, spec	cify the contain	ned percentage	of minimur	n post-			
P13.4*		media for user ar ronic, 🔀Paper,	nd product documentatio	on (tick box):							
P13.5	Ùser an		is item if paper documer entation on paper media								
	Totally c	hlorine-free									
	Element	al chlorine-free									
	Process	ed chlorine-free							Ħ		
P14	Volunta	ry programs									
P14.1			equirements of the follow	ing voluntar	y program(s):						
	ENERG Eco-labe Eco-labe		Criteria version: 7.1 Criteria version: Criteria version:	1	Date: 1/21 Date: Date:	Product	category: NE category: category:	31			
P15	Additio	nal information	(See NOTE B10)								
P9	Energy	consumption of	f specific configuration	n may vary;	description of	f the tested pro	oduct config	guration			
	NOTE: S informat knowled	Supplier makes n ion contained in t ge available at th I here is approxin	this document. All inform this document. All inform the time of completion, an nate and provided for inf	antees, assu ation provid id supplier s	rances or war led by supplier hall have no o	ranties whether in this documer bligation to upda	express or in nt is provided ate such info	mplied, re d based o rmation.	egardin on supp The inf	olier's format	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	Lenovo IdeaPad S340-15/S340-15 Touch Series	Logo
Model Number	81N8, 81NC 81QF, 81QG, 81QS, 81QU, 81RK	
Issue Date	2018/11/27	Lenovo
Additional information		

P7.1.1	Product environmental attributes						
(d)	Year of manufacture:				2018		
(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 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable						
		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]	12	12				
lents sting	Additional internal storage	No (Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
capability adjustments applied during testing	Discrete television tuner	No (Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
ability a	Discrete Audio Card	No (Yes / No)	No (Yes / No)	(Yes / No)	(Yes / No)		
cap app	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	Yes #: 1 (Yes / No)	# <i>:</i> (Yes / No)	#: (Yes / No)		
	Category of discrete graphics Card(s)		G3				
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)	10.38					
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled		10.55				
(g)	Idle state power demand (Watts);		•	•	A:3.02 ; B:3.05		
(h)	Sleep mode power demand (Watts);				A:0.5; B:0.58		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		A:0.5 ; B:0.59		
(j)	Off mode power demand (Watts);				A:0.38; B:0.40		
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		A:0.38; B:0.40		
(I)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 9	% of rated output powe	er (if applicable):			
	10% 20% 50%	100% Avera	ige				
(m)	External power supply efficiency (if appli	icable)*:					
	Average active efficiency: 88.45% , 88 *internal note: show values for all available external p		1%,89.03%,88.93%	6			
(0)	Minimum number of loading cycles that the batteries can withstand (applies only to notebook computers): 300						
(p-1)	Measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: NA						

(
(p-2)		dology used to determine information mentioned in p rogram Requirements for Single Voltage Externa Eligibility Criteria (Version 2.0)					
(p-3)	Measurement metho	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: ≥70% of Cmin					
(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: IEC 62623					
(q)	Sequence of steps for	or achieving a stable condition with respect to power Power on -> Wait 5 minutes ->Stable condition					
(r)	Description of how sl	eep and/or off mode was selected or programmed: Begin menu -> Power -> Select sleep or o	off mode				
(s)	Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or				
(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):						
(u)	Length of time after a period of user inactivity in which the computer automatically reaches a power			NA			
(v)		bre the display sleep mode is set to activate after		10min			
(w)		nergy-saving potential of power management functio Refer to User Guide					
(x)	User information on	how to enable the power management functionality: <i>Refer to User Guide</i>					
(z)	•	measurements: — test voltage in V and frequency in system, — information and documentation on the in sting:					
		230V50HZ-2%-Edition 2.0, 2011-01, Section 4	4, IEC62301				
Additio	onal Notebook Batter	y Information:					
		Battery[ies] not 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							
External/detachable Battery							
Bios Ba	ackup Battery						
Addition	nal information	1	1	1			
ne battery[ie	es] in this product cannot be e	asily replaced 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 sustituidas 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 [bateriju] pats vartotojas negali lengvai pakeisti. A termék akkumulátorát/akkumulátorait a felhasználó nem tudja egyedül egyszerűen kicserélni.

II-batterija/batteriji f'dan iI-prodott ma tistax/jistgħux tiġi/jiġu sostitui/iita/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 latwy 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 ușor înlocuită (înlocuite) de utilizatorii înșiși.

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.