

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			
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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 Flex 5 14				
Model number *	81X1, 81X2				
Issue date *	2020/3/9				
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	ımber *	81X1, 81X2	Logo			
Issue date *		2020/3/9	-	Leno	ovc	DTH
	environ	mental attributes - Legal requirements		Require		t met
Item				Yes	No	n.a.
P1		us substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTI	E B1)	\boxtimes		
P1.2*	Commer	e do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		\boxtimes		
P1.3*	hydrobro trichloroe	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), mofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetracl ethane, methyl bromide (see legal reference). Comment: Legal reference has no r ation values.				
P1.4*		do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych I (PCT) in preparations (see legal reference).	hlorinated	\boxtimes		
P1.5*	Products	do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 car ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	rbon atoms in	the 🔀		
P1.6*	Parts wit (see lega Commer	ek 🔀				
P1.7*	REACH	nt: Max limit in legal reference when tested according to EN1811:2011-5. Article 33 information about substances in articles is available at (add URL or mail ww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):	\boxtimes		
P2	Batterie	5				
P2.1*		duct contains a battery or an accumulator, the battery/accumulator is labeled with Information on proper disposal is provided in user manual. (See legal reference)	the disposal	\boxtimes		
P2.2*	Batteries	or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadr	nium. (See leç	gal 🔀		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		\boxtimes		
P3	Conforn	nity verification & Eco design (ErP)				
P3.1*		luct is CE-marked to show conformance with applicable legal requirements (see le laration of Conformity can be requested at: https://www.lenovo.com/us/en/complia				
P3.2*	The proc	luct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes		
	•	I information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/	lana da alarratia			
P5	Droduct	packaging				
P5.1*	Packagir	ng and packaging components do not contain more than 0,01% lead, mercur	ry, cadmium a	and 🔀		
	hexavale	ent chromium by weight of these together.				
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature e legal reference).				
P5.3*		luct packaging material is free from ozone depleting substances as specified in the l al reference).	Montreal Proto	ocol 🔀		
		t: Legal reference has no maximum concentration values.				
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 *		81X1, 81X2	Logo	Lond		
Issue da	te *	2020/3/9		Lend		ти
Product	t environ	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 /	It 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.			⊢⊢	<u> </u>
P7.5	Plastic p		<u> </u>	<u> </u>		
P7.6*		». 🛛	<u> </u>	<u> </u>		
F7.0	Labels are easily separable. (This requirement does not apply to safety/regulatory labels). Product lifetime					
P7.7*		ing can be done e.g. with processor, memory, cards or drives				
P7.8*		ng can be done using commonly available tools			+	\dashv
P7.9		arts are available after end of production for: 5 years				╞
P7.10		s available after end of production for: 5 years				⊢⊢
17.10		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
			al type: EFD8	000		
P7.12	Insulatio	n materials of external electrical cables are PVC free.			\boxtimes	
P7.13	Insulatio	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 in 25% post-consumer recycled content.	e retardants,	and		
P7.15	Printed c	ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g ed in IEC 61249-2-21. (See 1NOTE B2)	are low halo	igen	\square	
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), X Other:, CAS #: 35948-25-5		\boxtimes		
		nemical specifications of flame retardants in printed circuit boards (without compon g ISO 1043-4:	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: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	es/preparation	is in		
		nemical specifications of flame retardants in plastic parts > 25 g according ISO 104		\boxtimes		
P7.19	assigned	e parts > 25 g, flame retardant substances/preparations above 0,1% are used which I the following Risk phrases; and Hazard statements: cre(s) for these classifications is/are found at (add URL(s)): , (S	n have been See note B5)			
P7.20*	Postcons If YES; a a) Of t a pe or	sumer recycled plastic material content is used in the product (See Note B6): it 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 2.3% .	2	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 *	81X1, 81X2	Logo		
Issue date *	2020/3/9		Lenovo.	

Product environmental attributes - Market requirements (continued) 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 No	DTE B7):	
P7.22*		e free from mercury, i.e d specify: Number of la	. less than 0,1 mg/lamp. mps: and maxim	um mercury content p	er lamp: mg
P8	Batteries				
P8.1*	Battery chemica	I composition: Lithium	Ion/Lithium Manganes	e Dioxide	
P9	Energy consum	ption (See NOTE B8)			
P9.1		the following power leve	els or energy consumption	ons are reported:	
Energy mo		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-	max)	65 W	65 W	65 W	Full load
Categor	<u>y 2</u>				
Short Idle Enabled	State - WOL	5.24W	5.44W	5.64W	Use for ENERGY STAR V8 registration (P _{idle})
Long Idle Enabled	State - WOL	2.38W	2.38W	2.42W	Use for ENERGY STAR V8 registration (P _{idle})
Sleep (S3)	- WOL Enabled	0.58W	0.58W	0.64W	Use for ENERGY STAR V8 registration(P _{sleep})
Off (S5) - I	WOL Enabled	0.28W	0.28W	0.28W	Use for ENERGY STAR V8 registration(P _{off})
Off (S5) - I	WOL Disabled	0.28W	0.28W	0.28W	Use for ErP
EPS No-lo	ad	0.08 W	0.09 W	0.08 W	
	supply / charger plugged in the sconnected from the product.				
wall outlet but dis PTEC *(2)) 2.09W	2.14W	2.23W	
	ergy Consumptior		2.1711	2.2011	
TEC *(2) Typical En	ergy Consumptior	0.351kWh/week	0.360 kWh/week	0.375kWh/week	
ETEC *(2) Annual En	ergy Consumptior	18.23kWh/year	18.74kWh/year	19.5kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25 + P_{sleep} \times 0.35 + P_{long_ldle} \times 0.10 + P_{short_ldle} \times 0.30)$
					ed; P _{idle} : Idle State - WOL Enabled
External P	ower Supply Effici	ency Level (Internationa	al Efficiency Marking Pro	otocol) * : VI	
Display res	solution * : 2.07 m	egapixels			
Default tim	e to enter energy	save mode: 20 minutes			
P9.2*			tion is provided with the	product.	
P9.3		y class (monitors only):		-	
P10	Emissions				
		- Declared according t	to ISO 9296 (See NOTE	B9)	
P10.1	Mode	Mode description		Statistical upper lim	it A-weighted sound power level, L _{WA,c} (B)
	Idle	* Idle mode		* 2.7	
	Operation	* Operating (CPU)		* 3.1	
	Other mode	Declared A-weighted sour	nd pressure level (dB) $L_{p{ m Am}}$	19 (operator position	on desktop – idle)
	Other mode	Declared A-weighted sour	nd pressure level (dB) L_{pAm}	25 (operator position	on desktop – operating)
	Measured accor	ding to: 🔀 ISO 7779 🕻 🗌 Other	ECMA-74 (only if not covered by	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 <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

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	umber *	81X1, 81X2					Logo				
Issue dat	te *	2020/3/9						Le	no	VO	тн
Product	environ	mental attribut	es - Market require	ments (co	ontinued)			Re	quire	ment	me
Item									Yes	No	n.a
		magnetic emissi									
P10.4	program	n(s): MPR-II(3 pin	the requirement for low AC adapter only)	v frequency	electromagnetic fiel	ds of the foll	owing volun	tary	\boxtimes		
P12		mics for comput									
P12.1*	The disp	play meets the erg	gonomic requirements	of ISO 924	1-307 for visual disp	lay technolo	gies.		\boxtimes		
P12.2*	The phy	sical input device	meets the requiremer	nts of ISO 9	995 and ISO 9241-4	10.			\boxtimes		
P13	Packag	ing and docume	ntation								
P13.1*	Product	packaging mater	ial type(s): <i>carton</i> ial type(s): <i>paper</i> ial type(s): <i>LDPE</i>	weight (kg): 0.3163 kg): 0.0511 kg): 0.0885						
P13.2*	Product	plastic primary pa	ackaging is free from F	VC.					\square		
P13.3*		duct primary corr er recovered fibe	rugated fiberboard pac r content: <mark>65</mark> %	ckaging, sp	ecify the contained	percentage	of minimur	n post-	_		
P13.4*		media for user ar tronic, XPaper,	nd product documentat	ion (tick bo	к):						
P13.5	Ùser an		s item if paper docume entation on paper med								
	,	chlorine-free tal chlorine-free							\boxtimes		
	Process	ed chlorine-free									
P14	Volunta	ry programs									
P14.1	The pro	duct meets the re	quirements of the follo	wing volunt	ary program(s):						
	Eco-lab Eco-lab Eco-lab		Criteria version: Criteria version: Criteria version: Criteria version:	-	Date: 2020/3/9 Date: 2020/3/9 Date: 2020/3/9 Date:	Product Product	category: 2 category: category: category:				
P15	Additio	nal information (See NOTE B10)								
P9			specific configuration								
	informat knowled	ion contained in t lge available at th d here is approxin	o representations, gua his document. All infor e time of completion, a nate and provided for in	mation prov and supplier	vided by supplier in t r shall have no oblig	this documer ation to upda	nt is provided ate such info	d based of ormation. 1	n supp The inf	olier's format	ion
P9	See Ene	ergy Star Qualifie	d Notebooks & Tablet (v/index.cfm?fuseactior				_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 Flex 14ARE05	Logo		
Model Number	81X1, 81X2			
Issue Date	2020/3/9		Lenovo	
Additional information				

P7.1	P7.1.1 Product environmental attributes					
(d)	year of manufacture:				2020	
(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]	27.0				
tind	Additional internal storage	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)	
capability adjustments applied during testing	Discrete television tuner	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)	
ability a	Discrete Audio Card	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)	
cap	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)	
	Category of discrete graphics Card(s)					
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)	31.8				
Test results	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled	N/A				
(g)	Idle state power demand (Watts);		•		2.42	
(h)	Sleep mode power demand (Watts);				N/A	
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.64	
(j)	Off mode power demand (Watts);				N/A	
(k)	Off mode with WOL enabled power dema	and (Watts) (where en	abled);		0.28	
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100 %	% of rated output powe	er (if applicable):		
	10% N/A 20% N/A 50% N/A 100%	N/A Average N/A				
(m)	external power supply efficiency (if applied	cable)*:				
	Average active efficiency: 65W: 88.48%	5,87.89%,88.12%,89.7	3%			
(0)	*internal note: show values for all available external po Minimum number of loading cycles that t		and (applies only to n	otebook computers):		
. ,	0,7			· /	300 cycles	
(p-1)	Measurement methodology used to dete	rmine information men NA	tioned in points (I) – ir	nternal PSU efficiency:		
(p-2)	-2) Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: EN 50563:2011 measurement methodology					

(p-3)	Measurement metho	dology used to determine information mentioned in EN 61960 measurement methodolo		
(p-4)		dology used to determine information mentioned in a Point P9.1 in the Product IT Eco Declaration: <i>EN 62623:2013 measurement methodo</i>		
(q)	Sequence of steps for	or achieving a stable condition with respect to power EN 62623:2013 measurement method		
(r)	Description of how s	leep and/or off mode was selected or programmed: Based on user manual		
(s)	Sequence of events off mode:	required to reach the mode where the equipment au Based on user manual	tomatically changes to sleep and/or	
(t)		te condition before the computer automatically r s not exceed the applicable power demand requirem		30 mins
(u)		r a period of user inactivity in which the compute ver power demand requirement than sleep mode (ir		180 mins
(v)	Length of time befo	re the display sleep mode is set to activate after	user inactivity (in minutes):	10 mins
(w)	Information on the er	nergy-saving potential of power management functio Based on user manual	onality:	
(x)	user information on h	now to enable the power management functionality: Based on user manual		
(z)		neasurements: — test voltage in V and frequency in tem, — information and documentation on the instru 230V, 50GHz, Total Harmonic Distortion	mentation, set-up and circuits used	
Additio	nal 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	\boxtimes		
	I/detachable Battery			
	ckup Battery			
Other:				
Addition	al information			
)				
kymynaroph as baterías c ýměnu bater rugeren kan er Akku/die, asutajad ei s μπαταρία[-ε a/les batterie a/les batterie orisnik ne m a batteria/le etotāji paši r io gaminio b	ara[μτe] δατερικι[μ] в τοзи π de este producto no pueden s rie/baterií v tomto výrobku by ikke uden videre udskifte bat Akkus dieses Produkts kann/ saa selle toote akut/akusid ise c;] στο προϊόν αυτό δεν μπορ c(s présente(s) dans ce produ lože lako zamijeniti Bateriju sa batterie in questo prodotto no nevar nomainīt šā ražojuma a aterijos [bateriju] pats vartoto	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs et am u ovom proizvodu. n può/possono essere facilmente sostituita/e dall'utente. kumulatoru(-us).	verden.	
batterija/bat atteriet [ene e batterij(en żytkownik ni ou as bateri ateria (bateri atériu(-ie) v aterij/baterije	teriji f'dan il-prodott ma tistax,] i dette produktet kan ikke let) in dit product is (zijn) door d ie może sam w łatwy sposób ias deste produto não podem iile) din acest produs nu poat tomto výrobku nemôže vymie	fjistgħux tiği/jiğu 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.		

Det är inte enkelt för kunden att själv byta ut batteriet/batterierna. Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.