



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				
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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 *	LOQ 16IRH8				
Model number *	82XW				
Issue date *	2023/3/22				
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 number *	82XW	Logo	Lanova
Issue date *	2023/3/22		Lei Iovo,

Product	equirer	met		
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do comply with current European RoHS Directive. (See legal reference and ^{5NO} TE B1)			
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	\boxtimes		
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).			
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).			
P1.6*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0,5 µg/cm²/week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:2011-5.			
P1.7*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): https://www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, the battery/accumulator is labeled with the disposal symbol. Information on proper disposal is provided in user manual. (See legal reference)	\boxtimes		
P2.2*	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal reference)			
P2.3*	Batteries and accumulators are readily removable. (See legal reference)	\boxtimes		
P3	Conformity verification & Eco design (ErP)			
P3.1*	The product is CE-marked to show conformance with applicable legal requirements (see legal reference). The Declaration of Conformity can be requested at (add link or e-mail address): https://www.lenovo.com/us/en/compliance/eu-doc for EU; https://www.lenovo.com/us/en/compliance/uk-doc for UK	\boxtimes		
P3.2*	The product complies with the Eco design requirements for energy-related products, (see legal reference).			
	Required information is; given in item P15 or added to this document, available at (add URL): https://www.lenovo.com/us/en/compliance/eco-declaration			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0,01% lead, mercury, cadmium and hexavalent chromium by weight of these together.			
P5.2*	The packaging materials are marked with abbreviations and numbers indicating the nature of the material(s) used (see legal reference).			
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	\boxtimes		
P6	Treatment information			
P6.1*	Information for recyclers/treatment facilities is available (see legal reference).	\boxtimes		

⁵ 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 *	82XW	Logo	Lenovo
Issue date *	2023/3/22		Leliovo

	- Environmental conscious design	R	aaniran				
	the state of the s	<u> </u>					
Item	*=mandatory to fill in. Additional information regarding each item	may be found under P14.	Yes	No	n.a.		
P7	Design, Disassembly, recycling						
P7.1*	Parts that have to be treated separately are easily separable		\boxtimes				
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.						
P7.4*	Plastic parts > 25 g have material codes according to ISO 11469	referring ISO 1043-4.	\boxtimes				
P7.5	Plastic parts are free from metal inlays or have inlays that can be	e removed with commonly available tools.	\boxtimes				
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).						
	Product lifetime						
P7.7*	Upgrading can be done e.g. with processor, memory, cards or dr	rives	\boxtimes				
P7.8*	Upgrading can be done using commonly available tools		\boxtimes				
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						
	Material and substance requirements						
P7.11*	Product cover/housing material type (e.g. plastics, metal, aluming	um):					
	Material type: Plastic Material type: Metal Material type:						
P7.12	Insulation materials of external electrical cables are PVC free.						
P7.13	Insulation materials of internal electrical cables are PVC free.			\boxtimes			
P7.14	External plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine and 0,1% weight (1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and polyvinyl chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing more than 25% post-consumer recycled content.						
P7.15	Printed circuit boards, PCBs (without components) are low halog as defined in IEC 61249-2-21. (See ⁷ NOTE B2)	gen: all 🔲 PCBs > 25 g 🔲 are low halogen					
P7.16	,						
P7.17							
	Alt. 2: Chemical specifications of flame retardants in printed circu according ISO 1043-4: <i>FR(40)</i>						
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following concentrations above 0,1%: 1. Chemical name:, CAS #:, (See NOTE B4) 2. Chemical name: , CAS #: "	flame retardant substances/preparations in					
	Alt. 2: Chemical specifications of flame retardants in plastic parts	s > 25 g according ISO 1043-4: <i>FR(40)</i>					
P7.19	In plastic parts > 25 g, flame retardant substances/preparations a assigned the following Risk phrases; and Hazard statem The source(s) for these classifications is/are found at (add URL	nents:					

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.

⁶ 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.

⁷ 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.

P7.20*	Postconsumer recycled plastic material content is used in the product (See Note 8B6):		
	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 %.		
	or		
	b) The weight of recycled material is g.		

⁸ 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 * 82XW				Logo		Lon	0)//			
Issue date	*	2023/3/22	2					Len		J _{tit}
Product er	nvironme	ntal attri	butes - Market requi	rements (continued)		<u> </u>		Requir	ement	met
Item								Yes	No	n.a.
			tance requirements (•		
P7.21*	Biobased	l plastic m	aterial content is used	in the product (See No	OTE ^{9B} 7):					
	If YES: a	t least one	e of the two alternatives	s below shall be answe	ered:					
	. ′				aterial content (calcula	ited as a nercent	aue o	F		
	,	•	weight) is %.	ine biobasea piasto in	aterial content (calcula	ited do a percent	uge o	'		
	or	. ,	3 /							
	b) The	weight of	the biobased plastic m	naterial is g.						
P7.22*	Light sou	rces are fi	ree from mercury, i.e. I	less than 0,1 mg/lamp.						
	If mercur	y is used s	specify: Number of lam	nps: and maxim	um mercury content pe	er lamp: m	ng		Ш	
P8	Batteries	•								
P8.1*			omposition: <i>Li-polyme</i>	er						
P9	7									
P9.1		roduct the		s or energy consumption		T=		<u> </u>		
Energy mod	de *		Power level at	Power level at	Power level at	Reference/Sta			nergy	
Poak (On r	mayl		100 V AC 170 W	115 V AC 170 W	230 V AC 170 W	modes and tes	st met	noa "		
Peak (On-r	llax)		170 VV	170 VV	170 VV	Full load				
Category	<u>/ 2</u>									
Short Idle : Enabled	State - W	OL	11.77W	11.84W	12.20W	ENERGY (Pid	lle)			
Lilabieu										
Long Idle S	State - Wo	DL	2.83 W	2.84 W	3.57W	ENERGY STA	IR Co	mputers	V8	
Enabled						(P _{idle})				
Sleep (S3)	- WOL Er	abled	4.0014	4.00104	4.04104	ENERGY STA	IR Co	mputers	V8	
			1.00 W	1.00 W	1.01 W	(P _{idle})		•		
Sleep (S3)	- WOL Di	cablod	0.93 W	0.93 W	0.94 W	ENERGY STA	IP Co	moutors	1/2	
			0.33 **	0.55	0.54 VV					
Off (S5) - V	VOL Enab	led	0.30W	0.30 W	0.32 W	ENERGY STA	IR Co	mputers	V8	
						(P _{idle})				
Off (S5) - V	VOL Disa	bled	0.30W	0.30 W	0.32 W	Use for ErP				
EPS No-loa	ad		0.004104	0.00014/	0.086 W					
(External power si			0.061 W	0.063 W	0.000					
wall outlet but disconnected from the product.) ETEC *					E _{TEC} = (8760/1	1000)	x (P _{off} x (0.25		
Annual Ene	ergy Consi	umption	37.11 kWh/year	37.31 kWh/year	38.98 kWh/year	+ P _{sleep} x 0.35	+ Plon	g_idle x 0.	10+	
						P _{short_Idle} x 0.3				
P _{off} : Off Mode(S5) - WOL Enabled; P _{sleep} : Sleep Mode(S3) - WOL Enabled; P _{idle} : Idle State - WOL Enabled										
External Power Supply Efficiency Level (International Efficiency Marking Protocol) *: VI										
Display res	olution * :	2560*160	0 megapixels							
Default time	e to enter	energy sa	ve mode: 15 minutes							

Energy efficiency class (monitors only):

Information about the energy save function is provided with the product.

P9.2*

P9.3

⁹ 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

¹⁰ 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

P10	Emissions	nissions						
	Noise emission	on – Declared according to ISO 9296 (See NOTE	^{11B9})					
P10.1	Mode	Mode description	Statistical upper limit A-weighted sound power level, $L_{WA,c}$					
	Idle	* Idle	* 2.7					
	Operation	* CPU Operating	* 3.3					
	Other mode	Declared A-weighted sound pressure level (dB) $L_{p{ m Am}}$	21.8 (operator position desktop – idle)					
	Other mode	Declared A-weighted sound pressure level (dB) $L_{p m Am}$	Declared A-weighted sound pressure level (dB) $L_{p m Am}$ 27.2 (operator position desktop – operating)					
	Measured according to: ☐ ISO 7779 ☐ ECMA-74							
		Other (only if not co	overed by ECMA-74)					

Model number *	82XW	Logo	Lanova
Issue date *	2023/3/22		Lei IOVO"

Product e	nvironmental attributes - l	Market requirements	s (continu	ed)		Require	ment	met
Item		-		·		Yes	No	n.a.
	Electromagnetic emission	ıs						
P10.4	Computer display meets the program(s):	e requirement for low f	frequency (electromagnetic fields	s of the following voluntary			
P12	Ergonomics for computing	g products						
P12.1*	The display meets the ergo	nomic requirements of	f ISO 9241	-307 for visual displa	y technologies.			
P12.2*	The physical input device n	neets the requirements	s of ISO 99	95 and ISO 9241-41	0.			
P13	Packaging and document	ation						
P13.1*	Product packaging material Product packaging material Product packaging material Product packaging material	type(s): <i>Tracing pape</i> type(s): <i>Ocean-boun</i> type(s): <i>polyethylene</i>	er nd plastic l e cushion	weight (l	kg): 0.005 15			
P13.2*	Product plastic primary pac	kaging is free from PV	C.					
P13.3*	For product primary corrugated fiberboard packaging, specify the contained percentage of minimum post-consumer recovered fiber content: 85 %							
P13.4*	Specify media for user and product documentation (tick box): Electronic, Paper, Other							
P13.5	(Please only complete this item if paper documentation used) User and product documentation on paper media is chlorine-free: If Yes, please specify:						\boxtimes	
	Totally chlorine-free							
	Elemental chlorine-free							
	Processed chlorine-free							
P14	Voluntary programs							
P14.1	The product meets the requ	irements of the follow	ing volunta	ıry program(s):				
	ENERGY STAR®	Criteria version:		Date:	Product category:			
	Eco-label:	Criteria version:		Date:	Product category:			
	Eco-label:	Criteria version:		Date:	Product category:			
	Criteria version:	Date:		Product category:				
P15	Additional information (See ^{12NO} TE ^{13B10})							
P9	Energy consumption of specific configuration may vary; description of the tested product configuration:							
	NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.							
P9	See Energy Star Qualified http://www.energystar.go				ormation: ductGroup&pgw_code=CO			
	3,							

¹²

¹³ 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 Lot26 Information Sheet

- Network Equipment -

As required by_

- Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing
 Directive 2005/32/EC of the European Parliament and of the Council with regard to
 ecodesign requirements for standby and off-mode electric power consumption of
 electrical and electronic household equipment (ErP Lot 6)
- Commission Regulation (EU) No 801/2013 of 22 August 2013 implementing
 Directive 2009/125/EC of the European Parliament and of the Council with regard to
 ecodesign requirements for (ErP Lot 26).

Products scope of this sheet:

Notebook/Tablet Computer < 6 W Idle

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

Commercial name	LOQ 16IRH8	Logo
Model Number	82XW	
Product Type	NB	Lenovo.
Issue Date	2023/3/22	
Additional information		

year of manufacture:	
,	4
Network Standby Classification	LoNA Equipment
Off Mode Power (Watts)	0.32 Watts
Standby Mode	Watts
Description of how to enable Network Standby Mode	Refer to User Guide
Description of how to manually enter Network Standby Mode	Refer to User Guide
Default Delay time to Network Standby Mode	10.0 minutes
Reactivation Function from Network Standby Mode	Refer to User Guide

3)	Network Port	Ethernet	Ethernet							
	Present in Product									
	Activated at Shipment									
	Active in Network Standby Mode									
	Location of Network Port	JLAN1	JWLAN1	Choose	Choose	Choose	JWLAN1	Choose		
	Network Port Maximum Performance	1.0 GB/s	9.6 GB/s	GB/s	GB/s	GB/s	0.048 GB/s	GB/s		
	Network Protocol	IEEE 802.3	Wi-Fi6				BT 5.2			
	Network Standby Mode Power	0.04 Watts	0.04 Watts	Watts	Watts	Watts	Watts	Watts		
	Network Standby Power – All Connections									
	Additional Informatio		eactivating wire	eless network	(s) is included	d in the User M	anual			
)	Test parameters for	ivating and de					anual			
)	Test parameters for ambient temperat	ivating and demonstrates in the sure of the sure of the sure.	,	25	degrees Cels		anual			
)	Test parameters for ambient temperat	ivating and demeasurements ture, nd frequency	in Hz,	25 23			anual			
)	Test parameters for ambient temperat	ivating and demeasurements ture, nd frequency	in Hz,	25 23	degrees Cels		anual			
	Test parameters for ambient temperat	ivating and demeasurements ture, nd frequency	in Hz,	25 23	degrees Cels		anual			
)	Test parameters for ambient temperate test voltage in V a total harmonic dis	measurements rure, nd frequency tortion of the	in Hz, electricity supp	25 23	degrees Cels		anual			
)	Test parameters for ambient temperat test voltage in V at total harmonic dissystem,	measurements ture, nd frequency tortion of the	in Hz, electricity supp n on the	25 23 poly	degrees Cels		anual			
)	Test parameters for ambient temperatest voltage in V attotal harmonic dissystem, information and d	measurements ture, nd frequency tortion of the	in Hz, electricity supp n on the	25 23 poly	degrees Cels		anual			
	Test parameters for ambient temperate test voltage in V at total harmonic dissystem, information and disstrumentation, s	measurements ture, and frequency tortion of the documentation set-up and circ	in Hz, electricity supplements on the suits used for e	25 23 poly	degrees Cels		anual			
	Test parameters for ambient temperatest voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp	measurements cure, nd frequency tortion of the ocumentation et-up and circ ly efficiency (if Output Voltage	in Hz, electricity supplements on the cuits used for e applicable)*: Output Current	25 23 poly lectrical Output Power	degrees Cels	ctive 10%		lo Load Power		
	Test parameters for ambient temperates test voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A	measurements cure, nd frequency tortion of the cocumentation et-up and circ ly efficiency (if Output Voltage 19.68 V	in Hz, electricity supplement on the cuits used for e applicable)*: Output Current 3.25 A	25 23 poly lectrical Output Power 63.96 W	degrees Cels 0 V / 50 Hz Average Ac Efficience 85%	ctive 10%	Load N	Power 0.06W		
	Test parameters for ambient temperatest voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A ADLX65UDGK2A	measurements ture, nd frequency tortion of the cocumentation et-up and circ ly efficiency (if Output Voltage 19.68 V 19.88 V	in Hz, electricity supplements on the ruits used for e applicable)*: Output Current 3.25 A 3.25 A	25 23 poly lectrical Output Power 63.96 W 64.61 W	Average Ac Efficience 85% 87%	ctive 10%	Load N	0.06W 0.05W		
	Test parameters for ambient temperates test voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A	measurements ture, nd frequency tortion of the cocumentation et-up and circ ly efficiency (if Output Voltage 19.68 V 19.88 V	in Hz, electricity supplements on the ruits used for e applicable)*: Output Current 3.25 A 3.25 A 3.25 A	25 23 poly lectrical Output Power 63.96 W	degrees Cels 0 V / 50 Hz Average Ac Efficience 85%	ctive 10%	Load N	Power 0.06W		
	Test parameters for ambient temperatest voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A ADLX65UDGK2A	measurements cure, nd frequency tortion of the cocumentation et-up and circ ly efficiency (if Output Voltage 19.68 V 19.88 V 19.82V	in Hz, electricity supplements on the ruits used for e applicable)*: Output Current 3.25 A 3.25 A A A	25 23 23 25 26 27 27 27 27 27 27 27	Average Ac Efficience 85% 87%	ctive 10%	Load N	Power 0.06W 0.05W 0.06W		
	Test parameters for ambient temperatest voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A ADLX65UDGK2A	measurements cure, nd frequency tortion of the cocumentation et-up and circ ly efficiency (if Output Voltage 19.68 V 19.88 V 19.82V V	in Hz, electricity supplements applicable)*: Output Current 3.25 A 3.25 A A A	25 23 23 25 26 27 27 27 27 27 27 27	Average Ac Efficience 85% 87%	ctive 10%	Load N	Power 0.06W 0.05W 0.06W W		
5)	Test parameters for ambient temperates test voltage in V attotal harmonic dissystem, information and dinstrumentation, stesting External power supp Model ADLX65UDGU2A ADLX65UDGU2A ADLX65UDGI2A	measurements ture, Ind frequency Itortion of the Iocumentation Iocumenta	in Hz, electricity supplements on the suits used for e applicable)*: Output Current 3.25 A 3.25 A A A A Odetermine info	25 23 23 25 26 27 27 27 27 27 27 27	Average Ac Efficience 85% 87% 89% oned in points (ctive 10%	Load Niency	Power 0.06W 0.05W 0.06W W		