



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	I 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 *	Legion Pro 5 16IRX8				
Model number *	82WK				
Issue date *	2023-1-17				
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 *		82WK	Logo	Long	21/6	
Issue date) *	2023-1-17		Lend		тн
	environ	mental attributes - Legal requirements		Require		met
Item				Yes	No	n.a.
P1		ous substances and preparations				
P1.1*		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).		\boxtimes		
D4 0*		nt: Legal reference has no maximum concentration value.				
P1.3*		s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrach	loride 1 1 1	\boxtimes	Ш	
	trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum					
		ration values.				
P1.4*	Products	do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych	lorinated	\boxtimes		
		(PCT) in preparations (see legal reference).				
P1.5*		s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 cart ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	oon atoms in th	ie 🔀		
P1.6*		th direct and prolonged skin contact do not release nickel in concentrations above 0	,5 μg/cm²/wee	k 🔀	П	
		al reference).	,- 1-5		_	
		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		
		vww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure				
P2	Batterie					
P2.1*	symbol.	educt 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)	•			Ш
P2.2*		or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadm	nium. (See lega	al 🔀		
	referenc	/				
P2.3*		and accumulators are readily removable. (See legal reference)		\boxtimes	Ш	Ш
P3		nity verification & Eco design (ErP)				
P3.1*		duct is CE-marked to show conformance with applicable legal requirements (see leg	gal reference).		Ш	
		laration of Conformity can be requested at (add link or e-mail address): vww.lenovo.com/us/en/compliance/eu-doc for EU;				
		vww.lenovo.com/us/en/compliance/uk-doc for UK				
	nttps://v	www.ienovo.com/us/en/compilance/uk-uoc_lor ok				
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).		\boxtimes		
	, ,	d information is; given in item P15 or added to this document,		\boxtimes		
	rtoquirot	available at (add URL):			ш	
	https://v	vww.lenovo.com/us/en/compliance/eco-declaration				
P5		packaging				
P5.1*	Packagir	ng and packaging components do not contain more than 0,01% lead, mercury	, cadmium ar	nd 🔀		
	hexavale	ent 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).		s) 🔀			
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol		ol 🔀	П	П	
	(see lega	al reference).		-	_	_
		nt: Legal reference has no maximum concentration values.				_
P6		nt information			_	
P6.1*	ıntormatı	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 *		82WK Logo	Lon	0)//	
Issue dat	te *	2023-1-17	Len	OVC) _{TH}
Product	environ	mental attributes - Market requirements (See General NOTE GN below)			
	- Enviro	onmental conscious design F	Require	ment	met
Item		tory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a.
P7 P7.1*		Disassembly, recycling It have to be treated separately are easily separable			
P7.2*		naterials in covers/housing have no surface coating.			<u> </u>
P7.2		<u> </u>			
P7.3*		arts > 100 g consist of one material or of easily separable materials.		<u> </u>	<u> </u>
		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		<u> </u>	
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly available tools.		Щ.	<u> </u>
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			
P7.7*	Upgradin	ing can be done e.g. with processor, memory, cards or drives			
P7.8*		ng can be done using commonly available tools	X	\overline{H}	
P7.9		arts are available after end of production for: 3 years			-
P7.10		s available after end of production for: 5 years			-
1 7.10		and substance requirements			
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):			
		type: plastics:PC+ABS Material type: aluminum			
P7.12	Insulation	n materials of external electrical cables are PVC free.		\boxtimes	
P7.13	Insulation	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) bromine and 0,1% 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retardants, and chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts containing in 25% post-consumer recycled content.	_		
P7.15	Printed c	circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are low halogen and in IEC 61249-2-21. (See 1NOTE B2)			
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: FR(40)	\boxtimes		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without components): PA (additive), TBBPA (reactive) (See NOTE B3), Other:, CAS #:			
		nemical specifications of flame retardants in printed circuit boards (without components) > 25 g g ISO 1043-4: <i>FR(16)</i>			
P7.18	concentration 1. Chemical 2. Chemical 3. C	etarded plastic parts >25g contain the following flame retardant substances/preparations in ations above 0.1%: ical name: CAS #:			
	FR(40)	l specifications of flame retardants in plastic parts >25g according ISO 1043-4:			
P7.19	assigned	parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been the following Risk phrases; and Hazard statements: tec(s) for these classifications is/are found at (add URL(s)): ECC , (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	It least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calculated as ercentage of total plastic by weight) is 2.06 %. It weight of recycled material is 12.5 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 * Issue date *	82WK 2023-1-17	Logo	Len	ovc) _{tM}
Product environr	mental attributes - Market requirements (continued)		Requir	emen	t met
Item			Yes	No	n.a.

	Material and sub-	stance requirements	(continued)						
P7.21*	Biobased plastic material content is used in the product (See NOTE B7):								
	 a) Of total plastic b or 	c parts' weight > 25 g, y weight) is 0 %.			ted as a percentage of				
D7.00*		f the biobased plastic r				_			
P7.22*		rree rrom mercury, i.e. specify: Number of lan	less than 0,1 mg/lamp.	um mercury content pe	er lamp: mg	Ш			
P8	Batteries	opoony. Hambor or lan	npo. una maxima	ann moreary content pe	mamp.				
P8.1*	Battery chemical c	omposition: LI-ION Po	lymer battery and lith	ium-metal battery					
P9	Energy consump	Energy consumption (See NOTE B8)							
P9.1			s or energy consumption						
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-i	max)	300 W	300 W	300 W	Full load				
Category	<u>y 2</u>								
Short Idle Enabled	State - WOL	17.58 W	17.97 W	18.25 W	ENERGY STAR Computers V8				
Long Idle State - WOL Enabled		11.14 W	9.55 W	11.82 W	ENERGY STAR Computers V8				
Sleep (S3)	- WOL Enabled	1.79 W	1.77 W	1.77 W	ENERGY STAR Computers V8				
Off (S5) - V	VOL Enabled	0.25 W	0.24 W	0.25 W	ENERGY STAR Computers V8				
EPS No-loa (External power s	ad upply / charger plugged in the	0.08 W	0.08 W	0.08 W					
PTEC *		W	W	W		\boxtimes			
ETEC *	ergy Consumption	62.00 kWh/year	61.56 kWh/year	64.29 kWh/year	E _{TEC} = (8760/1000) x (P _{off} x 0.25 + P _{sleep} x 0.35 + P _{long_idle} x 0.10+ P _{short_idle} x 0.30)				
External Po	ower Supply Efficier		Efficiency Marking Pro		ed; P _{idle} : Idle State - WOL Enabled				
	olution * : 4.096 me	, ,	Ellicitity Warking 1 10	, VI		 			
		ave mode: 5 minutes				╫			
P9.2*			on is provided with the	product		+			
P9.3		class (monitors only):	on to provided with the	product.					
P10	Emissions	sides (merinters erriy).							
1 10		- Declared according to	ISO 9296 (See NOTE	B9)					
P10.1	Mode N	Node description	,	Statistical upper limi	t A-weighted sound power level, $L_{W\!A,c}$	(B)			
		Idle: Operating		* 2.6					
		CPU: Operating		* 5.4					
			d pressure level (dB) $L_{p m Am}$	19.1 (operator posit	tion desktop – idle)				
•	Other mode	Declared A-weighted sound	d pressure level (dB) $L_{p{ m Am}}$	46 (operator positio	n desktop – operating)				
	Measured accordi	ng to: SO 7779	ECMA-74	FCMA-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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

Model nur	nber *	82WK			Logo	Long	1/0	
Issue date	*	2023-1-17				Leno	VO.	
Product	environr	nental attributes	- Market requiremen	nts (continued)		Require	ment	met
Item			•	,		Yes	No	n.a.
	Electron	magnetic emissions	3					
P10.4	program	(s): MPR-II(3 pin AC	adapter only)	uency electromagneti	c fields of the following voluntar	ry 🔀		
P12		mics for computing						
P12.1*		,	omic requirements of IS		. ,	\boxtimes		
P12.2*		i	eets the requirements of	ISO 9995 and ISO 92	241-410.	\boxtimes		
P13		ng and documenta						
P13.1*	Product Product Product Product	packaging material t packaging material t packaging material t packaging material t	ype(s): Paper - Corrug ype(s): Paper - from of ype(s): Paper - from of ype(s): Plastic - Solid I ype(s): Plastic - LDPE ype(s): Paper - Bambo	fset / recycled sourc fset / recycled sourc EPE (solid Expanded (low density polyeth)	e(Handle) weight (kg): 0 e(Documents) weight (kg): 0 polyethylene) weight (kg): 0 weight (kg): 0 weight (kg): 0	.08		
P13.2*	Product	plastic primary pack	aging is free from PVC.			\boxtimes		
P13.3*		duct primary corruga er recovered fiber co		ing, specify the conta	ined percentage of minimum	post-		
P13.4*		media for user and p ic ⊠, Paper ⊠, Ot	roduct documentation (ther	tick box):				
P13.5	Ùser and		em if paper documentati ation on paper media is o					
	Element	hlorine-free al chlorine-free ed chlorine-free						
P14	Volunta	ry programs						
P14.1	The prod	duct meets the requi	rements of the following	voluntary program(s):				
	ENERG' Eco-labe		Criteria version: Criteria version: Criteria version:	Date: Date: Date:	Product category: Product category: Product category:			
P15		nal information (Sec						
<i>P</i> 9					of the tested product configu			
P9	the info supplier informa Accoun	rm ation contained ar's knowledge avail tion. The information t Representative fo	in this document. All it able at the time of con	nformation provided npletion, and supplie proximate and provid	or warranties whether express by supplier in this document or shall have no obligation to ded for informational purpose out information.	is provided update such	based	on
Fy			:://www.energystar.go					
			g, c.u.igo					

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	Legion Pro 5 16IRX8	Logo	
Model number *	82WK		Lenovo
Issue date *	2023-1-17		renovo.
Additional information			
•			-

d)	Year of manufacture:				2023
e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are
)	Etec value (kWh) per ErP Lot 3 Categorienable	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]			32	
ents ting	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)
ability a lied du	Discrete Audio Card	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)
cap	Discrete graphics Card(s) [number / #]	#: (Yes / No)	#: (Yes / No)	Yes #: 1 (Yes / No)	#: (Yes / No)
	Category of discrete graphics Card(s)			G7	
sults	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			35.97	
1)	Idle state power demand (Watts);			l	12.72
)	Sleep mode power demand (Watts);				1.60
	Sleep mode with WOL enabled power d	emand (Watts) (where	enabled);		1.60
	Off mode power demand (Watts);				0.22
.)	Off mode with WOL enabled power dem	nand (Watts) (where en	abled);		0.22
)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 °	% of rated output pow	er (if applicable):	
	10% 20% 50%	100% Avera	age		
n)	External power supply efficiency (if appli	icable)*:			
	Average active efficiency: 300W: 93.33	%, 92.97%,91.70% 23	OW:92.84%, 92.62%,	92.47%	
	*internal note: show values for all available external p	ower supplies			
o)	Minimum number of loading cycles that	the batteries can withs	tand (applies only to r	otebook computers):	300CYCLES
p-1)	Measurement methodology used to dete	ermine information mer	ntioned in points (I) – in	nternal PSU efficiency	
p-2)	Measurement methodology used to dete	ermine information mer		external PSU efficience	cy:

(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: EN 50563:2011 measurement methodology					
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration:	naximum, idle, sleep, off mode			
	EN 62623:2013 measurement methodology					
(q)	Sequence of steps for	or achieving a stable condition with respect to power	demand::			
		EN 62623:2013 measurement methodo	ology			
(r)	Description of how sl	eep and/or off mode was selected or programmed:				
	EN 62623:2013 measurement methodology					
(s)	Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or			
	refe	er to power management, 15mins automatically re	eaches sleep mode			
(t)		te condition before the computer automatically renot exceed the applicable power demand requirement		15		
(u)	Length of time after	r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	r automatically reaches a power	NA		
(v)		re the display sleep mode is set to activate after		5		
(w)		nergy-saving potential of power management function				
	User information	described in User Guide and Power Manager un programs	der Lenovo Vantage menu in all			
(x)	User information on I	now to enable the power management functionality:				
	User information	described in User Guide and Power Manager un programs	der Lenovo Vantage menu in all			
(z)	Test parameters for i	measurements: — test voltage in V and frequency in	Hz, — total harmonic distortion of			
		system, — information and documentation on the in- sting: 230V, 50GHz, Total Harmonic Distortion <2 9				
Addition	al Notebook Batter	v Information:				
		Battery[ies] <u>not</u> user replaceable	Battery[ies] user replaceable	n/a		
		The battery[ies] in this product cannot be easily replaced by users themselves. 1)				
Internal/b	ouilt-in Battery					
External/	detachable Battery					
Bios Bac	kup Battery					
Other:						
Additiona	I information					
		-	-			
\						

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. Lietotăji 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 tuottéen 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.

The battery[ies] in this product cannot be easily replaced by users themselves.