



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 *	https://www.lenovo.com/us/en/sustainability-resources/	
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 *	Legion 5 Pro 16ARH7				
Model number *	82RY				
Issue date *	2022-04-04				
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 *		82RY	Logo	Long)//O	
Issue date	*	2022-04-04		Lenc	JVU	ТН
Product	environ	mental attributes - Legal requirements		Require	ment	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)		Ц_	
P1.2*		s do not contain Asbestos (see legal reference).		\boxtimes		
P1.3*	Comment: Legal reference has no maximum concentration value. Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),					
	hydrobromofluorocarbons (HBFC), hydrochlorofluorocarbons (HCFC), Halons, carbontetrachloride, 1,1,1-trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.					
P1.4*	terpheny	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polych l (PCT) in preparations (see legal reference).				
P1.5*	chain co	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).				
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/wee	k 🔀		
P1.7*		Article 33 information about substances in articles is available at (add URL or mail	contact):			
	https://v	vww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	ŕ		_	_
P2	Batterie	S				
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with t	he disposal			
P2.2*		Information on proper disposal is provided in user manual. (See legal reference)	ium (Caalana	al 🔀	_	
	Batteries or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See legal reference)				<u> </u>] [
P2.3*	Batteries and accumulators are readily removable. (See legal reference)					ш
P3		nity verification & Eco design (ErP)			_	
P3.1*	The D	www.lenovo.com/us/en/compliance/eu-doc for EU and	gal reference). mail address	s):		
	nttps://v	vww.lenovo.com/us/en/compliance/uk-doc for UK				
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	П	
	rtoquirot	available at (add URL):				_
	https://v	vww.lenovo.com/us/en/compliance/eco-declaration				
P5		packaging				
P5.1*	hexavale	ng and packaging components do not contain more than 0,01% lead, mercury ent chromium by weight of these together.				
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature one legal reference).	`	, 2		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference).					
		nt: Legal reference has no maximum concentration values.				
P6		nt information			_	
P6.1*	Intormati	on for recyclers/treatment facilities is available (see legal reference).				

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 * Issue date *		82RY Logo		on	21/0	
		2022-04-04		.en) _{TH}
Product	environ	mental attributes - Market requirements (See General NOTE GN below	w)			
		onmental conscious design	Re	equirer		
Item P7		tory to fill in. Additional information regarding each item may be found under P14. Disassembly, recycling		Yes	No	n.a.
P7.1*		at have to be treated separately are easily separable			$\overline{\Box}$	
P7.2*		naterials in covers/housing have no surface coating.			X	\blacksquare
P7.3*		arts > 100 g consist of one material or of easily separable materials.				$\overline{\Box}$
P7.4*		arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		$\overline{\mathbb{X}}$	Ħ	$\overline{}$
P7.5	•	arts are free from metal inlays or have inlays that can be removed with commonly availab	le tools.	\boxtimes	Ħ	H
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			Ħ	H
	Product	lifetime				
P7.7*	Upgradir	ng can be done e.g. with processor, memory, cards or drives				
P7.8*	Upgradir	ng can be done using commonly available tools		X		
P7.9	Spare pa	arts are available after end of production for: 3 years				
P7.10	Service i	s available after end of production for: 5 years				
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
P7.12		type: Plastic:PC+ABS Material type: aluminum n materials of external electrical cables are PVC free.			\boxtimes	
P7.13		n materials of internal electrical cables are PVC free.		+	$\overline{\mathbb{X}}$	\vdash
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) bromine	and 0.1%	$\overline{\square}$		\blacksquare
17.14	weight (* polyvinyl	1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame retar chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in parts in 25% post-consumer recycled content.	dants, and			
P7.15	Printed of	circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g are lowed in IEC 61249-2-21. (See 1NOTE B2)	w halogen			
P7.16	Flame re Marking:	etarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:				
P7.17		chemical specifications of flame retardants in printed circuit boards > 25 g (without core) (additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #:	nponents):			
		nemical specifications of flame retardants in printed circuit boards (without components) > g ISO 1043-4: <i>FR(16)</i>	25 g			
P7.18	Alt. 1			\square		
		etarded plastic parts >25g contain the following flame retardant substances/preparations above 0.1%:	arations in			
	Commo	ent: No legal limits exist, this is a market requirement.				
	2. Chem	ical name: Oligomeric phosphorous compound CAS #: confidential ical name: CAS #: ical name: CAS #:				
		ical name: , CAS #:				
	Alt. 2	al specifications of flame retardants in plastic parts >25g according ISO 1043-4:				
P7.19	In plastic	parts > 25 g, flame retardant substances/preparations above 0,1% are used which have	been	\square		
	•	If the following Risk phrases; and Hazard statements: H411; H413			ш	
		rce(s) for these classifications is/are found at (add URL(s)): European Council Di	rective			
D= 65*	67/548/E					
P7.20*	If YES; a a) Of t	sumer recycled plastic material content is used in the product (See Note B6): at least one of the two alternatives below shall be answered; total plastic parts' weight > 25 g, the postconsumer recycled plastic material content (calc ercentage of total plastic by weight) is	ulated as			
		weight of recycled material is 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 *	82RY 2022-04-04	Logo	Lenovo
Product environr	nental attributes - Market requirements (continued)		Requirement met
Item			Yes Nona

D7 04*		stance requirements		OTE DZ\.				
P7.21*	•		in the product (See No	•				
	a) Of total plast				ated as a percentage of			
	or	, , ,						
P7.22*		of the biobased plastic r	less than 0,1 mg/lamp.					
1 7.22		specify: Number of lar		um mercury content pe	er lamp: mg			
P8	Batteries							
P8.1*	Battery chemical	composition: LI-ION Po	olymer battery					
P9		nergy consumption (See NOTE B8)						
P9.1			s or energy consumption					
Energy mod		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-r	nax)	300 W	300 W	300 W	Full load			
Category	<u>/ 2</u>							
Short Idle : Enabled	State - WOL	23.18 W	23.01 W	23.36 W	Energy Star Computers V8			
Long Idle S Enabled	State - WOL	13.17 W	13.14 W	13.38 W	Energy Star Computers V8			
Sleep (S3)	- WOL Enabled	1.75 W	1.72 W	1.80 W	Energy Star Computers V8			
Sleep (S3)	- WOL Disabled	1.75 W	1.72 W	1.80 W	Energy Star Computers V8			
Off (S5) - V Disabled	VOL Enabled /	0.43 W	0.44 W	0.44 W	Energy Star Computers V8			
EPS No-loa (External power si	ad upply / charger plugged in the connected from the product.)	0.011 W	0.011 W	0.011 W				
PTEC *	connected from the product.)	W	W	W				
— -	ergy Consumption		''					
ETEC * Annual Ene	ergy Consumption	85.84 kWh/year	85.09 kWh/year	86.70 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)			
		Poff: Off Mode(S5) - WO	l OL Enabled: P _{sleep} : Sleep	Mode(S3) - WOL Enable	ed; P _{idle} : Idle State - WOL Enabled			
External Po	wer Supply Efficie		Efficiency Marking Pro		<u> </u>			
Display res	olution * : 4.096 me	egapixels	<u>-</u>					
		ave mode: 10 minutes						
P9.2*	Information about	the energy save function	on is provided with the	product.				
P9.3		class (monitors only):	·					
P10	Emissions							
-	Noise emission -	- Declared according to	ISO 9296 (See NOTE	B9)				
P10.1		Mode description	,		it A-weighted sound power level, L _{WA,c} (B)			
	Idle	* Idle (Operating)		* 2.6				
	Operation	* HDD:Operation CPU:Operation		* NA(No HDD) 3.9				
	Other mode	Declared A-weighted soun	d pressure level (dB) $L_{p{ m Am}}$	18.5 (operator posi	tion desktop – idle)			
	Other mode	Declared A-weighted soun	d pressure level (dB) $L_{p{\sf Am}}$	30.2 (operator position desktop – operating)				
	Measured accord	· =	ECMA-74					
		Other	(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 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 number *		82RY			Logo	Long	V/0	
Issue date	*	2022-04-04				Leno	VO.	м
Product	environr	nental attributes	- Market requiremen	nts (continued)		Require	ment	met
Item						Yes	No	n.a.
	Electron	nagnetic emission	IS					
P10.4				uency electromagnetic	c fields of the following voluntary	\boxtimes		
D40		(s): MPR-II(3 pin A						
P12 P12.1*		mics for computin	g products nomic requirements of IS	O 0241 207 for vioual	diantay taahnalagiga			_
		•	•		• • •		 	屵
P12.2*	. ,	<u>'</u>	eets the requirements of	ISO 9995 and ISO 924	41-410.			
P13		ng and document						
P13.1*			type(s): Corrugated Fib					
			type(s): paper(manual) type(s): PP weight (kg):	weight (kg): 0	.424			
	Product	packaging material nackaging material	type(s): PE weight (kg):	0.019				
		packaging material		eight (kg): 0.164				
P13.2*			kaging is free from PVC.	oight (kg).		\boxtimes		\Box
P13.3*	For proc	duct primary corrug	ated fiberboard packagi	ng, specify the contai	ned percentage of minimum po	ost-		$\overline{}$
		er recovered fiber o		. ,				
P13.4*			product documentation (t	ick box):				
	Electron	ic 🔀, Paper 🔀, C	Other					
P13.5			tem if paper documentati					
			tation on paper media is	chlorine-free:		\boxtimes		
	If Yes, p	lease specify:						
	Totally c	hlorine-free						
	Element	al chlorine-free				$\overline{\boxtimes}$		
	Process	ed chlorine-free						
P14		ry programs						
P14.1	The prod	duct meets the requ	irements of the following	voluntary program(s):				
	ENERG'	Y STAR®	Criteria version:	Date:	Product category:			
	Eco-labe		Criteria version:	Date:	Product category:			
	Eco-labe	el:	Criteria version:	Date:	Product category:			
P15	Addition	nal information (Se	ee NOTE B10)					
P9	Energy	consumption of s _i	pecific configuration ma	ay vary; description o	of the tested product configura	ation:		
					r warranties whether express o			
					by supplier in this document is			on
					r shall have no obligation to up			
			ion provided nere is ap _l or more information.	proximate and provid	led for informational purposes	only. See	a Lenc	700
P9	Account	i Nepresentative i	or more imormation.					

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 5 Pro 16ARH7	Logo	
Model number *	82RY		Longvo
Issue date *	2022-04-04		Lenovo.
Additional information			
			-

d)	Year of manufacture:				2022
:)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are
1	Etec value (kWh) per ErP Lot 3 Categorianable	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]			16	
ents ting	Additional internal storage	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)
djustm ring tes	Discrete television tuner	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)
capability adjustments applied during testing	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)			G6	
saults	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			46.94	
J)	Idle state power demand (Watts);			l	13.38
1)	Sleep mode power demand (Watts);				1.80
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		1.80
)	Off mode power demand (Watts);				0.44
()	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.44
)	Internal power supply efficiency at 10 %	, 20 %, 50 % and 100 °	% of rated output pow	er (if applicable):	-
	10% 20% 50%	100% Avera	ige		
n)	External power supply efficiency (if appli	icable)*:			
	Average active efficiency: 230	W:92.84%, 92.62%			
	*internal note: show values for all available external p	ower supplies			
o)	Minimum number of loading cycles that	the batteries can withst	tand (applies only to r	otebook computers):	300CYCLES
p-1)	Measurement methodology used to dete	ermine information men	ntioned in points (I) – in	nternal PSU efficiency	:
o-2)	Measurement methodology used to dete	ermine information men	tioned in points (m) –	external PSU efficienc	cv.

(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:	maximum, idle, sleep, off mode			
		EN 62623:2013 measurement methodo	ology			
(q)	Sequence of steps for	or achieving a stable condition with respect to power	demand::			
	EN 62623:2013 measurement methodology					
(r)	Description of how s	eep and/or off mode was selected or programmed:				
		EN 62623:2013 measurement methodo	ology			
(s)		required to reach the mode where the equipment auwer management, 30mins automatically reaches				
	·		•			
(t)	condition which does	te condition before the computer automatically re- not exceed the applicable power demand requirement	ents for sleep mode (in minutes):	30min		
(u)		r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in		NA		
(v)		re the display sleep mode is set to activate after	<i>y</i> \	10min		
(w)	Information on the er	nergy-saving potential of power management function	nality:			
	User information	described in User Guide and Power Manager un	der Lenovo Vantage menu in all			
		programs	-			
(x)		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)		measurements: — test voltage in V and frequency in system, — information and documentation on the in- sting:				
		230V, 50GHz, Total Harmonic Distortion	1 <2 %			
Addition	nal 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/I	built-in Battery					
External/detachable Battery						
Bios Backup Battery						
Other:	Other:					
Additiona	al information					
)						

The battery[ies] in this product cannot be easily 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 [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.