

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 *	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	

	based on product specification or test results based obtained from sample testing), that the product nts given in this declaration.
Type of product *	Notebook
Commercial name *	Yoga Pro 9 16IRP8,Lenovo Slim Pro 9 16IRP8,YogaPro 16s IRP8
Model number *	83BY,83C0
Issue date *	2023/2/27
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.

modelin	umber *	83BY,83C0 Logo			
lssue da	ite *	2023/2/27	Leno	ovo	<b>D</b> <sub>m</sub>
Produc	t enviror	mental attributes - Legal requirements	Require		t met
Item			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.	$\square$		
P1.3*	hydrobr trichloro	s do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), 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*	terphen	s do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated yl (PCT) in preparations (see legal reference).	$\square$		
P1.5*	Product	s do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in t ontaining at least 48% per mass of chlorine in the SCCP (see legal reference).	he 🔀		
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/wee al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	ek 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	$\boxtimes$		
P2	Batterie	95			
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 referenc	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See leg e)	al 🔀		
P2.3*	Batterie	s and accumulators are readily removable. (See legal reference)	$\square$		
P3	Confor	nity verification & Eco design (ErP)			
P3.1*	The pro The Dec https://	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): www.lenovo.com/us/en/compliance/eu-doc for EU; www.lenovo.com/us/en/compliance/uk-doc for UK			
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,	$\square$		
	•	available at (add URL):	_	_	_
	https://	www.lenovo.com/us/en/compliance/eco-declaration			
P5		t packaging			
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium a ent chromium by weight of these together.	ind 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material ee legal reference).	(s) 🔀		
P5.3*	The pro (see leg	duct packaging material is free from ozone depleting substances as specified in the Montreal Proto al reference).	col 🔀		
P6		nt: Legal reference has no maximum concentration values.			
	reatine				

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 nu	ımber *	83BY,83C0	Logo	Lon		
Issue dat	te *	2023/2/27		Leng	JVO	тн
Product	environ	mental attributes - Market requirements (See General NOTE GN	below)			
		onmental conscious design		Require		net
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
<b>P7</b> P7.1*		Disassembly, recycling at have to be treated separately are easily separable				
P7.2*						
=		naterials in covers/housing have no surface coating.		<u> </u>		
P7.3*		arts > 100 g consist of one material or of easily separable materials.			<u> </u>	$\mathbf{X}$
P7.4*		arts > 25 g have 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.		$\square$	
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).		$\square$		
		lifetime				
P7.7*		ng can be done e.g. with processor, memory, cards or drives				
P7.8*	Upgradir	ng can be done using commonly available tools		$\square$		
P7.9	Spare pa	arts are available after end of production for: <b>5</b> years				
P7.10	Service i	is available after end of production for: <b>5</b> years				
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
P7.12		type: aluminum Material type: plastic Materia n materials of external electrical cables are PVC free.	al type:			_
P7.13		n materials of internal electrical cables are PVC free.			<u>Ц</u>	
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 I chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i an 25% post-consumer recycled content.	e retardants, and			
P7.15	Printed of	circuit boards, PCBs (without components) are low halogen: all ⊠ PCBs > 25 g ed in IEC 61249-2-21. (See 1NOTE B2)	are low haloger	ו 🛛		
P7.16		etarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		$\boxtimes$		
P7.17		hemical specifications of flame retardants in printed circuit boards > 25 g (without c		_	_	
	TBBF	PA (additive), 🔲 TBBPA (reactive) (See NOTE B3), 🔀 Other: <i>DOPO</i> , CAS #: 3594	8-25-5	$\bowtie$		
		hemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4: <i>FR(40)</i>	ents) > 25 g	$\bowtie$		
P7.18	<u>Alt. 1: </u> Fl	ame retarded plastic parts > 25 g contain the following flame retardant substance	s/preparations ir	า		
	1. Chem 2. Chem	rations above 0,1%: ical name: , CAS #: (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "				
	<u>Alt. 2: </u> Cl	hemical specifications of flame retardants in plastic parts > 25 g according ISO 104	3-4: <b>FR40</b>	$\boxtimes$		
P7.19		parts > 25 g, flame retardant substances/preparations above 0,1% are used which			Π	
	assigned	the following Risk phrases; and Hazard statements:				_
			See note B5)			
P7.20*	Postcon	sumer recycled plastic material content is used in the product (See Note B6):		$\boxtimes$		
	a) Of t a po or	at least one of the two alternatives below shall be answered; total plastic parts' weight > 25 g, the postconsumer recycled plastic material conten ercentage of total plastic by weight) is <b>9.67%</b> . e weight of recycled material is <b>16.48</b> g.	t (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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

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 *	83BY,83C0 2023/2/27	Logo	Lenovo
	nental attributes - Market requirements (continued)		Requirement met

Item

Yes No n.a.

		ubstance requirements			
P7.21*	Biobased plasti	c material content is use	ed in the product (See N	OTE B7):	
	If YES; at least	one of the two alternativ	es below shall be answ	ered;	
				aterial content (calcul	ated as a percentage of
	total plastic	c by weight) is %.			
		t of the biobased plastic	material is g.		
P7.22*		re free from mercury, i.e			
-		ed specify: Number of la	mps: and maxim	um mercury content p	per lamp: mg
<b>P8</b> P8.1*	Batteries	al composition: Lithium-	ion		
P9		nption (See NOTE B8)			
P9.1		the following power leve	els or energy consumpti	ons are reported.	
Energy m		Power level at	Power level at	Power level at	Reference/Standard for energy
0,		100 V AC	115 V AC	230 V AC	modes and test method *
Peak (On	-max)	170 W	170 W	170 W	Full load
Catego	ry2				
Short Idle	e State - WOL	12.11 W	12.09 W	12.35 W	ENERGY STAR Computers V8
Enabled					(P <sub>idle</sub> )
Long Idle	State - WOL	0.14 W	0.15 W	0.30 W	ENERGY STAR Computers V8
Enabled					(P <sub>idle</sub> )
Sleep (S3	3) - WOL Disabled	0.14 W	0.15 W	0.30 W	ENERGY STAR Computers V8
Off (S5) -	WOL Disabled	0.02 W	0.02 W	0.14 W	ENERGY STAR Computers V8
EPS No-lo		0.07 W	0.084 W	0.066 W	
(External power wall outlet but di	r supply / charger plugged in lisconnected from the product	.)			
PTEC *	<b>o</b> "	W	W	W	
Typical Er	nergy Consumption	n 32.42 kWh/year	32.40 kWh/year	<b>33.96</b> kWh/year	E <sub>TEC</sub> = (8760/1000) x (P <sub>off</sub> x 0.25
	nergy Consumption		32.40 KVVII/year	33.90 KVVII/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$ + $P_{sleep} \times 0.35 + P_{long}$ <i>idle</i> $\times 0.10+$
					P <sub>short_Idle</sub> x 0.30)
					led; P <sub>idle</sub> : Idle State - WOL Enabled
		iency Level (Internationa	al Efficiency Marking Pro	otocol) * : VI	
Display re	esolution * : 3200*	2000 megapixels			
Default tin	ne to enter energy	save mode: 5 minutes			
P9.2*	Information abo	ut the energy save func	tion is provided with the	product.	
P9.3	Energy efficience	y class (monitors only):			
P10	Emissions				
		1 – Declared according	to ISO 9296 (See NOTE		
P10.1	Mode Idle	Mode description			nit A-weighted sound power level, $L_{WA,c}$ (B)
		* Idle		* 2.5	X
	Operation Other mode	* CPU	nd propouro (cuo) (dB)	* 3.0	
	Other mode		nd pressure level (dB) $L_{pAm}$		sition desktop – idle)
	Other mode	Declared A-weighted sou	nd pressure level (dB) $L_{p{ m Am}}$	21.5 (operator pos	sition desktop – operating)
	Measured acco	~ <u> </u>	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 <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

NOTE B9 A Guidance document on Acoustic Noise is available; see <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

Model nu	umber *	83BY,83C0					Logo	Lor		
lssue da	te *	2023/2/27						Ler	ovo	<b>D</b> <sub>M</sub>
Product	t environi	nental attribut	<mark>es - Market requiren</mark>	nents (con	tinued)				iremer	
tem								Y	es No	n.a.
		nagnetic emissi								
P10.4	program	(s): MPR-II(3 pin	the requirement for low f	requency el	lectromagne	tic fields of the fol	lowing volun	itary		
P12		mics for comput								
P12.1*			gonomic requirements o				gies.			
P12.2*	The phy	sical input device	meets the requirements	s of ISO 999	95 and ISO 9	241-410.			$\triangleleft$	
P13		ing and docume								
P13.1*	Product Product Product	packaging mater packaging mater packaging mater		weight (kg weight (kg weight (kg weight (kg weight (kg	j): 0.0168 j): 0.0053 j): 0.044					
P13.2*			ackaging is free from PV					Σ		
P13.3*	For pro		ugated fiberboard pack		cify the cont	ained percentage	of minimur	<u>~</u>		
P13.4*	Specify		nd product documentatio	n (tick box):						
P13.5	Ùser an		s item if paper documer entation on paper media							]
	,	hlorine-free al chlorine-free							] ]	
	Process	ed chlorine-free						Г		
P14	Volunta	ry programs								
P14.1	The pro	duct meets the re	quirements of the follow	ing voluntar	y program(s	):				
		Y STAR® el: <b>EPEAT</b> el:	Criteria version: V8 Criteria version: 16 Criteria version:		Date: Date: Date:	Product	category: 2 category: category:			
P15	Additio	nal information (	See NOTE B10)							
<b>P9</b>	Energy	consumption of	specific configuration	may vary;	description	of the tested pr	oduct confi	guration:		
	the info supplie informa	rmation contain r's knowledge a tion. The inform	no representations, gu ed in this document. A vailable at the time of o ation provided here is e for more information.	ll informati completion, approxima	ion provideo , and suppli	d by supplier in t er shall have no	his docume obligation	ent is provid to update si	led base ich	ed on
<b>P9</b>	See En	ergy Star Qualifi	ed Notebooks & Table ov/index.cfm?fuseact	t Computer			p&pgw_cod	le=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 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	Yoga Pro 9 16lRP8,Lenovo Slim Pro 9 16lRP8,YogaPro 16s IRP8	Logo
Model Number	83BY,83C0	
Product Type	Notebook	Lenovo
Issue Date	2023/2/27	
Additional information		

year of manufacture:	2023
Network Standby Classification	LoNA Equipment
Off Mode Power (Watts)	0.14 Watts
Standby Mode	N/A Watts Mode Not Applicable minutes Default Delay Time
Description of how to enable Network Standby Mode	included in the User Manual
Description of how to manually enter Network Standby Mode	included in the User Manual
Default Delay time to Network Standby Mode	5.0 minutes
Reactivation Function from Network Standby Mode	included in the User Manual

(3)	Network Port	Wired Ethernet	Wireless Ethernet	USB-A	USB-C	HDMI	BlueTooth	Other:
	Present in Product							
	Activated at Shipment							
	Active in Network Standby Mode							
	Location of Network Port	Choose	N/A	Choose	Choose	Choose	N/A	Choose
	Network Port Maximum Performance	GB/s	2.4 Gb/s	GB/s	s GB/s	G <b>B</b> /s	2M Gb/s	GB/s
	Network Protocol		802.11ax,a,b ,g,n.ac				BT5.1	
	Network Standby Mode Power	Watts	0.3 Watts	Watts	Watts	Watts	0.32 Watts	Watts
	Network Standby Power – All Connections		I		Watts		I	
	Additional Information Instructions on acti		ctivating wirele	ss network(s)	) is included in ti	he User Manua	I	
4)		vating and dead	ctivating wirele	ss network(s)	) is included in ti	he User Manua	1	
4)	Instructions on acti	vating and dead	ctivating wirele		) is included in the second		1	
4)	Instructions on acting Test parameters for n	vating and dead neasurements, ure,		2			1	
4)	Test parameters for n ambient temperat test voltage in V a total harmonic dis	vating and dead neasurements, ure, nd frequency ir	n Hz,	24 23	5.3 degrees Cels		I 	
4)	Test parameters for n ambient temperat test voltage in V a total harmonic dis system,	vating and dead neasurements, ure, nd frequency ir tortion of the e	n Hz, electricity suppl	24 23	5.3 degrees Cels 30 V / 50 Hz		I 	
4)	Instructions on active Test parameters for market ambient temperat test voltage in V a total harmonic dis system, information and d instrumentation, s	vating and dead neasurements, ure, nd frequency in tortion of the e ocumentation	n Hz, electricity suppl	22 23 Iy 0.	5.3 degrees Cels 30 V / 50 Hz		/ 	
	Instructions on activityTest parameters for mambient temperattest voltage in V atotal harmonic dissystem,information and d	vating and dead neasurements, ure, nd frequency in tortion of the e ocumentation et-up and circu	n Hz, electricity suppl on the iits used for ele	22 23 Iy 0.	5.3 degrees Cels 30 V / 50 Hz		I 	
	Instructions on active Test parameters for market ambient temperat test voltage in V a total harmonic dis system, information and d instrumentation, s testing	vating and dead neasurements, ure, nd frequency in tortion of the e ocumentation et-up and circu	n Hz, electricity suppl on the iits used for ele	22 23 ly 0. ectrical	5.3 degrees Cels 30 V / 50 Hz		I No Loa	
	Instructions on active Test parameters for mean ambient temperate test voltage in V a total harmonic dis system, information and d instrumentation, s testing External power supple	vating and dead measurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap Output Voltage 20 V	n Hz, electricity suppl on the its used for ele oplicable)*: Output Current 8.5 A	2:       2:       ly       0.       ectrical       Output       Power       170 W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active	ius 10% Loac	I No Loa 7 Powe 0.066	r W
	Instructions on active Test parameters for mean ambient temperate test voltage in V atoral harmonic dis system, information and de instrumentation, stesting External power supple Model	vating and dead measurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap Voltage 20 V V	n Hz, electricity supple on the hits used for electricable)*: Output Current 8.5 A A	2:       2:       ly       0.       ectrical       Output       Power       170 W       W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active Efficiency	ius 10% Loac	I No Loa 7 Powe 0.066	r W W
	Instructions on active Test parameters for mean ambient temperate test voltage in V atoral harmonic dis system, information and de instrumentation, stesting External power supple Model	vating and dead measurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap Output Voltage 20 V	n Hz, electricity suppl on the its used for ele oplicable)*: Output Current 8.5 A	2:       2:       ly       0.       ectrical       Output       Power       170 W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active Efficiency	ius 10% Loac	I No Loa / Powe 0.066	r W
	Instructions on active Test parameters for mean ambient temperate test voltage in V atoral harmonic dis system, information and de instrumentation, stesting External power supple Model	vating and dead neasurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap Voltage 20 V V VV	on the electricity supple its used for electricity supple oplicable)*: Output Current 8.5 A A A	22 23 by 0. ectrical Output Power 170 W W W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active Efficiency	ius 10% Loac	I No Loa / Powe 0.066	r W W W
4)	Instructions on active Test parameters for mean ambient temperate test voltage in V a total harmonic dis system, information and de instrumentation, setesting External power supple Model ADL170SDC3A	vating and dead measurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap vefficiency (if ap voltage 20 V V V V V V V V V	n Hz, electricity suppl on the its used for electricity suppl its used for electricity output Current 8.5 A A A A A A A A A	2       2:       ly       0.       ectrical       Output       Power       170 W       W       W       W       W       W       W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active Efficiency 92%	ius 10% Loac Efficiency	I No Loa 7 Powe 0.066	r W W W W
	Instructions on active Test parameters for mean ambient temperate test voltage in V atorial harmonic dis system, information and desting External power supplest Model ADL170SDC3A	vating and dead measurements, ure, nd frequency in tortion of the e ocumentation et-up and circu y efficiency (if ap vefficiency (if ap voltage 20 V V V V V V V V V	on the electricity supple on the its used for electricity supple oplicable)*: Output Current 8.5 A A A A A A A A A	2       2:       ly       0.       ectrical       Output       Power       170 W       W       W       W       W       W       W	5.3 degrees Cels 30 V / 50 Hz .09% Average Active Efficiency 92% ed in points (5) – e	ius 10% Loac Efficiency	I No Loa 7 Powe 0.066	r W W W W