



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 *	http://www.lenovo.com/social_responsibility/us/en/environment	.html	
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 statemen	conforms to the statements given in this declaration.				
Type of product *	NB				
Commercial name *	Lenovo Legion Y740-17 Refresh, Lenovo Legion Y9000K				
Model number *	81UG, 81UJ, 81UK				
Issue date *	2019/04/26				
Intended market *	Global Europe Asia, Pacific & Japan Americas Other				
Additional information					

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

#### About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:

P4.1 – P4.3 Consumable materials

P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products.

Model nu	mber *	81UG, 81UJ, 81UK	Logo	Long		
Issue dat	e *	2019/04/26		Lend		<b>J</b> <sub>TM</sub>
Product	environ	mental attributes - Legal requirements		Require	men	met
Item		<u> </u>		Yes	No	n.a.
P1	Hazardo	ous substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE	B1)	$\boxtimes$		
P1.2*		do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.		$\boxtimes$		
P1.3*	hydrobro trichloroe	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), omofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachethane, methyl bromide (see legal reference). Comment: Legal reference has no mation values.				
P1.4*		do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychel (PCT) in preparations (see legal reference).	lorinated			
P1.5*		do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carl ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	bon atoms in the	• 🔀		
P1.6*	(see lega	h 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/week			
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	contact):	$\boxtimes$		
P2	Batterie	s				
P2.1*		duct contains a battery or an accumulator, the battery/accumulator is labeled with land Information on proper disposal is provided in user manual. (See legal reference)	the disposal	$\boxtimes$		
P2.2*	Batteries reference	or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadme)	nium. (See legal	$\boxtimes$		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)		$\boxtimes$		
P3	Conforn	nity verification & Eco design (ErP)				
P3.1*	The Dec	duct is CE-marked to show conformance with applicable legal requirements (see legal legal requirements): laration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/eu-doc	gal reference).			
P3.2*		duct complies with the Eco design requirements for energy-related products, al reference).		$\boxtimes$		
	Required	d information is; given in item P15 or added to this document,  available at (add URL): lenovo.com/us/en/compliance/ed	no declaration	$\boxtimes$		
P5	Product	packaging	,o-ucciai aliUII			
P5.1*		ng and packaging components do not contain more than 0,01% lead, mercur	y, cadmium an	d 🔀		
	hexavale	ent chromium by weight of these together.				
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature elegal reference).	,	, 🔼		
P5.3*	(see lega	luct packaging material is free from ozone depleting substances as specified in the Nal reference). It: Legal reference has no maximum concentration values.	Nontreal Protoco	ol 🔀		
P6		nt information				
P6.1*	Informati	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 *	81UG, 81UJ, 81UK	Logo	Lonovo
Issue date *	2019/04/26		LEI IOVO

Product	t environmental attributes - Market requirements (See General NOTE GN below)			
	·	Require	ment	met
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			
P7.2*	Plastic materials in covers/housing have no surface coating.		$\boxtimes$	
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 removed with commonly available tools.			$\boxtimes$
P7.6*	Labels are easily separable. (This requirement does not apply to safety/regulatory labels).	$\overline{\boxtimes}$		
	Product lifetime			
P7.7*	Upgrading can be done e.g. with processor, memory, cards or drives	$\boxtimes$		
P7.8*	Upgrading can be done using commonly available tools	$\overline{\boxtimes}$		
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, aluminum):			
	Material type: <i>plastics</i> Material type: <i>metal</i> Material type: <i>aluminu</i>	m		
P7.12	Insulation materials of external electrical cables are PVC free.		$\boxtimes$	
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 a solid size of the			
	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.	3		
P7.15	Printed circuit boards, PCBs (without components) are low halogen: all PCBs > 25 g 🗵 are low halogen	n 🛛		
	as defined in IEC 61249-2-21. (See 1NOTE B2)	' 🔼		
P7.16	Flame retarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:	X		
	Marking: >PC+ABS-TD15FR(40) PC+ABS-FR(40)<			
P7.17	Alt. 1: Chemical specifications of flame retardants in printed circuit boards > 25 g (without components):			
	TBBPA (additive), TBBPA (reactive) (See NOTE B3), Other: <b>DOPO</b> , CAS #: <b>35948-25-5</b>	$\boxtimes$	Ш	
	Alt. 2: Chemical specifications of flame retardants in printed circuit boards (without components) > 25 g			
	according ISO 1043-4: FR(40) for DPOP	$\boxtimes$	Ш	Ш
P7.18	Alt. 1: Flame retarded plastic parts > 25 g contain the following flame retardant substances/preparations in	n		
	concentrations above 0,1%:			$\boxtimes$
	1. Chemical name: , CAS #: (See NOTE B4) 2. Chemical name: , CAS #: "			
	3. Chemical name: , CAS #: "			
	·			
D7 10	Alt. 2: Chemical specifications of flame retardants in plastic parts > 25 g according ISO 1043-4:		<del>  </del>	<u> </u>
P7.19	In plastic parts > 25 g, flame retardant substances/preparations above 0,1% are used which have been assigned the following Risk phrases; and Hazard statements:		Ш	
P7.20*	The source(s) for these classifications is/are found at (add URL(s)): , (See note B5)  Postconsumer recycled plastic material content is used in the product (See Note B6):			
1 7.20	i octobricanior recycled plastic inaterial content is used in the product (See Note Bo).			
	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 0%.			
	b) The weight of recycled material is <b>0</b> 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 <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 *	81UG, 81UJ, 81UK	Logo	Lonovo
Issue date *	2019/04/26		LEI IOVO,

Product environmental attributes - Market requirements (continued)	Requi	remer	nt met
Item	Yes	No	n.a.

	Material and sub	stance requirements	(continued)			
P7.21*	Biobased plastic n	naterial content is used	I in the product (See N	OTE B7):		
	If YES; at least on	e of the two alternative	es below shall be answ	ered;		
			the biobased plastic n	naterial content (calcula	ated as a percentage of	
	total plastic b	y weight) is %.				
	or b) The weight o	f the biobased plastic r	naterial is g.			
P7.22*	, , , , , , , , , , , , , , , , , , , ,	free from mercury, i.e.				X
		specify: Number of lan		num mercury content pe	er lamp: mg	
P8	Batteries		•	•		
P8.1*	Battery chemical of	composition: Li-polyme	er, Lithium Metal			
P9		tion (See NOTE B8)				
P9.1		e following power level		ons are reported:		
Energy mo	de *	Power level at	Power level at	Power level at	Reference/Standard for energy	
Dook (On		100 V AC 230 W	115 V AC	230 V AC	modes and test method *	
Peak (On-	max)	230 VV	230 VV	230 VV	Full load	
EPS No-loa	ad	0.053 W	0.058 W	0.150 W		
(External power s	supply / charger plugged in the sconnected from the product.)					
PTEC *	,	W	W	W		$\boxtimes$
Typical En	ergy Consumption					
ETEC *		kWh/year	kWh/year	kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$	$\boxtimes$
Annual En	ergy Consumption				+ P <sub>sleep</sub> x 0.35 + P <sub>long_Idle</sub> x 0.10+ P <sub>short Idle</sub> x 0.30)	
		Post: Off Mode(S5) - WO	L Enabled: Poloon: Slee	o Mode(S3) - WOL Enabl		
External Po	ower Supply Efficier	ncy Level (International			ou, inde the outer	
	solution * : 1920*10	· ·				
		ave mode: 30 minutes				$\dashv$
P9.2*		the energy save function	on is provided with the	product		
P9.3			on is provided with the	product.		
		class (monitors only):				
P10	Emissions	- Declared according to	LCO 0206 (Can NOTI	- DO)		
P10.1		Mode description	130 9290 (See NOTI		it A-weighted sound power level, Lwa,c	(B)
F 10.1		Idle		* 3.0	iit A-weighted Sound power level, LWA,c	(D)
	Operation *	CPU Operating		* 5.0		$\overline{}$
		Declared A-weighted sound	d pressure level (dR) -		ition desktop – idle)	
	Other mode	- Verlanda A-Weighted South	d pressure level (db) L <sub>pA</sub>	m 21.1 (Operator pos	<u> </u>	
	Other mode	Declared A-weighted soun	d pressure level (dB) $L_{pA}$	m 42.1 (operator posi	ition desktop – operating)	
	Measured accordi	ng to: 🔀 ISO 7779 🔀	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 <a href="http://www.ecma-international.org/publications/standards/Ecma-370.htm">http://www.ecma-international.org/publications/standards/Ecma-370.htm</a>

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 nun		81UG, 81UJ, 81UK			Logo	Leno	V/0	
Issue date	*	2019/04/26				Lelio	VO,	н
Product e	environn	nental attributes - Market	requirements (con	tinued)		Require	ment	met
Item						Yes	No	n.a.
		nagnetic emissions						
P10.4	program		. ,	ectromagnetic fields	of the following voluntary	′ 🔲		
P12	Ergonor	nics for computing products	3					
P12.1*	The disp	ay meets the ergonomic requ	irements of ISO 9241-3	07 for visual display	technologies.		$\boxtimes$	
P12.2*	The phys	ical input device meets the re	quirements of ISO 9995	5 and ISO 9241-410			$\boxtimes$	
P13		ng and documentation						
P13.1*	Product	packaging material type(s): Foackaging materi	weight (kg)	): <b>0.019</b>				
P13.2*	Product p	plastic primary packaging is fro	ee from PVC.					
P13.3*	•	uct primary corrugated fiberb r recovered fiber content: <b>80</b>		ify the contained pe	ercentage of minimum p	ost-		
P13.4*	Specify r	nedia for user and product doo onic, ⊠Paper, ☐ Other						
P13.5	Ùser and	only complete this item if pape product documentation on pa ease specify:		ree:				
	Totally cl	nlorine-free						
	Elementa	al chlorine-free						
	Processe	ed chlorine-free						
P14	Voluntai	y programs						
P14.1	The prod	uct meets the requirements of	f the following voluntary	program(s):				
	ENERGY Eco-labe Eco-labe	I: Criteria v	version:	Date: Date: Date:	Product category: Product category: Product category:			
P15		al information (See NOTE B						
P9		consumption of specific con						
	informati knowledg	upplier makes no representation contained in this document ge available at the time of comhere is approximate and provon.	. All information provide pletion, and supplier sh	ed by supplier in this nall have no obligation	document is provided be on to update such informa	ased on supp ation. The inf	olier's formati	ion
P9		rgy Star Qualified Notebooks a w.energystar.gov/index.cfm?fi						

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	Lenovo Legion Y740-17 Refresh, Lenovo Legion Y9000K	Logo	
Model Number	81UG, 81UJ, 81UK		Longvo
Issue Date	2019/04/26		Lenovo.
Additional information			

d)	Year of manufacture:				2019
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 Categor enable	ry and capability adjust	ments applied when a	III discrete graphics o	cards (dGfx) are
		Category A (according to ErP Lot 3)	Category B (according to ErP Lot 3)	Category C (according to ErP Lot 3)	Category D (according to ErP Lot 3)
	Memory over base [GB]			32G	
ents sting	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	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	
ssults	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			26.10	
g)	Idle state power demand (Watts);	1	1	1	8.87
ר)	Sleep mode power demand (Watts);				0.76
)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.78
)	Off mode power demand (Watts);				0.40
<b>k</b> )	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.40
)	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	cable)*:			
	Average active efficiency: 91.93%,92.56	8%			
p)	*internal note: show values for all available external power supplies  Minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):  300				
o-1)	Measurement methodology used to dete	rmine information mer	ntioned in points (I) – in	nternal PSU efficiency:	:

(p-2) Measurement methodology used to determine information mentioned in points (m) – external PSU efficience ENERGY STAR® Program Requirements for Single Voltage External Ac-Dc and Ac-Ac Power Supering Eligibility Criteria (Version 2.0)					
(p-3)	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: ≥70% of Cmin				
(p-4)	Measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:  IEC 62623				
(q)	Sequence of steps for achieving a stable condition with respect to power demand:  **Power on -> Wait 5 minutes -> Stable condition**				
(r)	Description of how sleep and/or off mode was selected or programmed:  **Begin menu -> Power -> Select sleep or off mode**  **Begin menu -> Select sleep or off				
(s)	Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:				
		NA NA			
(t)	Duration of idle state condition before the computer automatically reaches sleep mode, or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes):			30min	
(u) Length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes):			NA		
(v)	Length of time before the display sleep mode is set to activate after user inactivity (in minutes): 10min				
(w)	(w) Information on the energy-saving potential of power management functionality:  **Refer to User Guide**				
(x)	User information on how to enable the power management functionality:  **Refer to User Guide**				
(z)	Test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:				
230V50HZ-2%-Edition 2.0, 2011-01, Section 4, IEC62301					
Additional Notebook Battery Information:					
Addition	iai Notebook Batter	Battery[ies] <b>not</b> user replaceable	Battery[ies] user replaceable	n/a	
		The battery[ies] in this product cannot be easily replaced by users themselves. 1)	Dattory[.oo] door ropidoodalio	Ti/a	
Internal/built-in Battery					
External/detachable Battery					
Bios Backup Battery					
Other:					
Additional 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. 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. II-batterija/batteriji f'dan iI-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 ușor înlocuită (înlocuite) de utilizatorii înșiși. 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 vaihdettavissá. 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.