

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 *	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 statements given in this declaration.						
Type of product *	Notebook					
Commercial name *	Legion Y540-17					
Model number *	81Q4					
Issue date *	2019/4/2					
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 * Issue date *		81Q4 Logo	Lend		
		* 2019/4/2			<b>/O</b> <sub>TM</sub>
Produc	t environ	mental attributes - Legal requirements	Require	men	t met
Item			Yes	No	n.a.
P1		ous substances and preparations			
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE B1)	$\boxtimes$		
P1.2*	Comme	s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	$\boxtimes$		
P1.3*	hydrobro trichloro	do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), profluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum ration values.			
P1.4*	terpheny	do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated (I (PCT) in preparations (see legal reference).	$\boxtimes$		
P1.5*		do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in th ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	e 🔀		
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/weel al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	< 🔀		
P1.7*	REACH	Article 33 information about substances in articles is available at (add URL or mail contact): ww.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	$\boxtimes$		
P2	Batterie	S			
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)	$\boxtimes$		
P2.2*	Batteries	s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega e)	I 🛛		
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)	$\square$		
P3	Conform	nity verification & Eco design (ErP)			
P3.1*	The Dec	duct is CE-marked to show conformance with applicable legal requirements (see legal reference). laration of Conformity can be requested at (add link or e-mail address): ww.lenovo.com/us/en/compliance/eu-doc			
P3.2*	The pro	luct complies with the Eco design requirements for energy-related products, al reference).	$\boxtimes$		
	Require	d information is; given in item P15 or added to this document, available at (add URL): <i>lenovo.com/us/en/compliance/eco-declaration</i>	$\boxtimes$		
P5	Product	packaging			
P5.1*	Packagi	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium ar ent chromium by weight of these together.	id 🔀		
P5.2*	The pac	kaging materials are marked with abbreviations and numbers indicating the nature of the material re legal reference).	s) 🔀		
P5.3*	The prod (see leg	luct packaging material is free from ozone depleting substances as specified in the Montreal Protoc al reference). nt: Legal reference has no maximum concentration values.	ol 🔀		
P6		nt information			
		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 nu	umber *	81Q4	Logo			
Issue dat	te *	2019/4/2		Len	OVC	
Product		mental attributes - Market requirements (See General NOTE GN	below)			
		nmental conscious design		Require		
Item		tory to fill in. Additional information regarding each item may be found under P14.		Yes	No	n.a.
P7.1*		Disassembly, recycling t have to be treated separately are easily separable				
P7.2*		haterials in covers/housing have no surface coating.			╞	╞
P7.3*		arts > 100 g consist of one material or of easily separable materials.			╞	╞
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		╞	╞
P7.6*	-	re easily separable. (This requirement does not apply to safety/regulatory labels).			╞	╞
1 7.0	Product					
P7.7*		ig can be done e.g. with processor, memory, cards or drives				
P7.8*		g can be done using commonly available tools			╞	╞
P7.9		Ints are available after end of production for: 5 years				╞
P7.10		s available after end of production for: 5 years				╞
		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum):				
	Material	type: <i>plastics</i> Material type: Materia	al type:			
P7.12	Insulatio	n materials of external electrical cables are PVC free.			$\boxtimes$	
P7.13	Insulatio	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) b 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine i n 25% post-consumer recycled content.	e retardants, ar	nd		
P7.15		ircuit boards, PCBs (without components) are low halogen: all PCBs > 25 g d in IEC 61249-2-21. (See 1NOTE B2)	are low haloge	n	$\square$	
P7.16	Flame re	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4: >PC+ABS-TD15FR(40)<		$\square$		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without c A (additive), TBBPA (reactive) (See NOTE B3), Other: <b>TBBPA</b> , CAS #: <b>79-</b> 5				
	according	nemical specifications of flame retardants in printed circuit boards (without compon g ISO 1043-4: <i>FR(16)</i>				
P7.18	concentr 1. Chem 2. Chem	ame retarded plastic parts > 25 g contain the following flame retardant substance ations above 0,1%: ical name: <b>Phosphorus compounds</b> , CAS #: <b>confidential</b> (See NOTE B4) ical name: , CAS #: " ical name: , CAS #: "	es/preparations	in 🔀		
	<u>Alt. 2: </u> Ch <b>TD15FR</b>	nemical specifications of flame retardants in plastic parts > 25 g according ISO 104 (40)<				
P7.19	•	parts > 25 g, flame retardant substances/preparations above 0,1% are used which the following Risk phrases; <b>confidential</b> and Hazard statements: <b>confidential</b>				
			See note B5)			
P7.20*	Postcons	sumer recycled plastic material content is used in the product (See Note B6):			$\boxtimes$	
	a) Oft ape or	t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conter ercentage of total plastic by weight) is %.	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 *	81Q4	Logo	
Issue date *	2019/4/2		Lenovo
Product environm	nental attributes - Market requirements (continued)		Requirement met

Item

Requirement met

Yes	No	n.a.
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	Material and sub	stance requirements (	(continued)				
P7.21*	Biobased plastic	material content is used	in the product (See NO	TE B7):			
	If YES: at least or	ne of the two alternative	s below shall be answer	ed:			
	,			,	ated as a percentage of		
	total plastic	by weight) is %.					
	or						
D7.00*		of the biobased plastic n					
P7.22*		ght sources are free from mercury, i.e. less than 0,1 mg/lamp.					
P8	Batteries						
P8.1*	Battery chemical	composition: Li-ion Pol	ymer				
P9	Energy consum	Energy consumption (See NOTE B8)					
P9.1			s or energy consumptior	ns are reported:			
Energy mo		Power level at	Power level at	Power level at	Reference/Standard for energy		
		100 V AC	115 V AC	230 V AC	modes and test method *		
Peak (On-	max)	W	W	W			
EPS No-loa	ad	W	W	W			
(External power s wall outlet but dis	supply / charger plugged in the connected from the product.)						
PTEC *		W	W	W			
	ergy Consumption						
ETEC *	aray Consumption	kWh/year	kWh/year	kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.25)$		
Annual Ene	ergy Consumption				+ $P_{sleep} \times 0.35$ + $P_{long_{ldle}} \times 0.10$ + $P_{short_{ldle}} \times 0.30$ )		
		Poff: Off Mode(S5) - WC	L Enabled: Peleen: Sleep I	Mode(S3) - WOL Enabl	ed; P <sub>idle</sub> : Idle State - WOL Enabled	1	
External Po	ower Supply Efficie		Efficiency Marking Prot				
Display res	solution * : n	negapixels			-		
Default tim	e to enter energy s	ave mode: minut	es				
P9.2*	Information about	the energy save function	on is provided with the p	roduct.		$\square$	
P9.3	Energy efficiency	class (monitors only):					
P10	Emissions						
			ISO 9296 (See NOTE I				
P10.1		Mode description			it A-weighted sound power level, L <sub>WA</sub>	,с <b>(В)</b>	
	Idle	* Idle		* 2.4			
		* CPU Operating		* 4.7			
		Declared A-weighted sound		(operator po	osition desktop – idle)		
	Other mode Declared A-weighted sound pressure level (dB) $L_{pAm}$ (operator position desktop – operating)						
	Measured accord	ing 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 http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B9 A Guidance document on Acoustic Noise is available;

 $see \ \underline{http://www.ecma-international.org/publications/standards/Ecma-370.htm}$ 

Model nu	mber *	81Q4				Logo			
Issue dat	:e *	2019/4/2					Leno	ovc	тн
Product	environ	nental attribu	tes - Market requirer	ments (continued)			Require		met
ltem							Yes	No	n.a.
		magnetic emiss							
P10.4	Comput program		the requirement for low	frequency electromagne	tic fields of the foll	owing volun	tary		
P12	Ergono	mics for compu	iting products						
P12.1*	The disp	olay meets the e	rgonomic requirements o	of ISO 9241-307 for visua	al display technolo	gies.			$\boxtimes$
P12.2*	The phy	sical input devic	e meets the requirement	s of ISO 9995 and ISO 9	9241-410.		$\square$		
P13	Packag	ing and docum	entation						
P13.1*	Product	packaging mate	rial type(s): <i>PAPER</i> rial type(s): <i>EPE</i> rial type(s): <i>LDPE+PP</i>	weight (kg): <b>1.240</b> weight (kg): <b>0.190</b> weight (kg): <b>0.024</b>					
P13.2*	Product	plastic primary p	packaging is free from P\	VC.			$\square$		
P13.3*		duct primary con	rrugated fiberboard packer content: <b>80</b> %	kaging, specify the cont	ained percentage	of minimur	n post-		
P13.4*		media for user a ronic, XPaper,	nd product documentatio	on (tick box):					
P13.5	Úser an		nis item if paper documer nentation on paper media						
		hlorine-free al chlorine-free							
	Process	ed chlorine-free					H		
P14	Volunta	ry programs							
P14.1			equirements of the follow	ving voluntary program(s	):				
	Eco-labe Eco-labe	el:	Criteria version: Criteria version: Criteria version:	Date: Date: Date:		category: category: category:			
P15	Additio	nal information	(See NOTE B10)						
P9			of specific configuration						
	informat knowled	ion contained in ge available at t I here is approxi	no representations, guara this document. All inform he time of completion, ar mate and provided for in	nation provided by suppl nd supplier shall have no	ier in this documer o obligation to updated	nt is provided ate such info	d based on sup ormation. The in	plier's format	tion
P9	See Ene	ergy Star Qualifie	ed Notebooks & Tablet C ov/index.cfm?fuseaction=	computers for the latest i =find_a_product.showPr	nformation: oductGroup&pgw_	_code=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 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 Y540-17IRH	Logo
Model Number	81Q4	
Issue Date	2019/4/2	Lenovo
Additional information		

P7.1.1	Product environmental attributes						
(d)	Year of manufacture:						
(e)	Etec value (kWh) per ErP Lot 3 Catego disabled and if the system is tested with				cards (dGfx) are		
(f)	Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable						
		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]			28			
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	Discrete Audio Card	(Yes / No)	(Yes / No)	No (Yes / No)	(Yes / No)		
cap app	Discrete graphics Card(s) [number / #]	#: (Yes / No)	#: (Yes / No)	Yes #: 1 (Yes / No)	#: (Yes / No)		
	Category of discrete graphics Card(s)			G7			
esults	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			13.53			
(g)	Idle state power demand (Watts);				3.91		
(h)	Sleep mode power demand (Watts);				0.89		
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		0.89		
(j)	Off mode power demand (Watts);				0.47		
(k)	Off mode with WOL enabled power dema	and (Watts) (where er	nabled);		0.47		
(I)	Internal power supply efficiency at 10 %,	20 %, 50 % and 100	% of rated output pow	er (if applicable):			
	10% 20% 50%	100% Avera	age				
(m)	External power supply efficiency (if applied	cable)*:					
	Average active efficiency: 91.5%, 92.6%	, D					
	*internal note: show values for all available external po			· · · · · · · · · · · · · · · · · · ·			
(0)	Minimum number of loading cycles that t	ne patteries can withs	tand (applies only to n	otebook computers):	300		
(p-1)	Measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: N/A						

	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: ENERGY STAR® Program Requirements for Single Voltage External Ac-Dc and Ac-Ac Power Supplies Eligibility Criteria (Version 2.0)				
(p-3) Measurement metho	Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: <i>≥</i> 70% of Cmin				
	dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration: IEC 62623	naximum, idle, sleep, off mode			
(q) Sequence of steps for	or achieving a stable condition with respect to power Power on -> Wait 5 minutes ->Stable condition				
(r) Description of how s	leep and/or off mode was selected or programmed: Begin menu -> Power -> Select sleep or o	off mode			
(s) Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or			
condition which does	te condition before the computer automatically re s not exceed the applicable power demand requirement of provide of users insertivity in which the computer	ents for sleep mode (in minutes):	30min		
mode that has a low	r a period of user inactivity in which the compute ver power demand requirement than sleep mode (in	minutes):	NA		
	pre the display sleep mode is set to activate after nergy-saving potential of power management functio		10min		
(w) information on the en	Refer to User Guide	nanty.			
(x) User information on	how to enable the power management functionality: <i>Refer to User Guide</i>				
	measurements: — test voltage in V and frequency in system, — information and documentation on the in- sting: 230V50HZ-2%-Edition 2.0, 2011-01, Section 4	strumentation, set-up and circuits			
Additional Notebook Batter					
	Battery[ies] not user replaceable	Battery[ies] user replaceable	n/a		
	The battery[ies] in this product cannot be easily replaced by users themselves. $^{\mbox{\tiny 1)}}$				
Internal/built-in Battery					
External/detachable Battery					
Bios Backup Battery					
Other:					
Additional information					
as baterías de este producto no pueden s ýměnu baterie/baterií v tomto výrobku by rugeren kan ikke uden videre udskifte bat	родукт не може да се замени[ят] лесно от самите потребител er sustituidas fácilmente por los propios usuarios. neměli provádět sami uživatelé. teriet/batterierne i dette produkt. können nicht ohne weiteres vom Benutzer selbst ausgetauscht w				
l μπαταρία[-ες] στο προϊόν αυτό δεν μπορ a/les batterie(s présente(s) dans ce produ orisnik ne može lako zamijeniti Bateriju sa	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες it ne peuvent être facilement remplacée(s) par les utilisateurs eu	x-mêmes.			

La batteria/le batterie in questo prodotto non può/possono essere facilmente sostituita/e dall'utente Lietotäji paši nevar nomaint šã ražojuma akumulatoru(-us). Šio gaminio baterijos [bateriju] 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 miII-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 latwy 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. Baterij/baterije v temi zdelku uporabniki sami ne morejo zlahka zamenjati. Tămân tuotteen akku [akut] elivăt] ole helposti käyttäjän vaihdettavissa.

Tämän tuoteen 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.