

Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P14.

Brand *	Lenovo	Logo		
Company name *	Lenovo			
Contact information *	Lenovo Global Environmental Affairs Alvin L Carter 1009 Think Place Building 2 / 5F1 Morrisville, North Carolina 27560 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/social_responsibility/us/en/datasheets_/	notebooks.html		

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 PC				
Commercial name *	Lenovo Ideapad 100S-14IBR				
Model number *	80R9				
Issue date *	2015-11-04				
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.

Quality	Control	Requireme	nt met
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	\boxtimes	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality contro such as organized by IT-Företagen (see www.itecodeclaration.org).		

Model number *	80R9		
Issue date *	2015-11-04	Logo	lenovo

Produc	t environmental attributes - Legal requirements	Require	ment	t met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium,	\bowtie		
	0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal			
	reference and Note B1)			
P1.2*	Products do not contain Asbestos (see legal reference).	\bowtie		
D1 2*	Comment: Legal reference has no maximum concentration value.			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum			
	concentration values.			
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	\boxtimes		
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the	\boxtimes		
	chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).			
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			\boxtimes
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as			\boxtimes
	pentachlorophenol and derivatives (see legal reference).	<u> </u>		لالك
	Comment: Legal reference has no maximum concentration values.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5			
	microgram/cm ² /week (see legal reference).			
	Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact):	\bowtie		
	http://www.lenovo.com/social_responsibility/us/en/materials.html			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	\boxtimes		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the	\square		
. 2.0	design of the product). Exception: Batteries that are permanently installed for safety, performance, medical or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).			
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).		╞	- -
			<u> </u>	<u> </u>
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).	\boxtimes		
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	\square		
P4	Consumable materials	<u> </u>		
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			\square
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the	- -	H	
1.5	product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium and hexavalent chromium by weight of these together.	\square		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).			
P5.3*			+	- -
∟ວ.ວ	The product packaging material is free from ozone depleting substances as specified in the Montreal Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	M		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model n	umber *	80R9			
lssue da	ite *	2015-11-04 Logo	lene	ovo.	
Produc	t environ	mental attributes - Market requirements - Environmental conscious design	Require	ment	met
Item		tory to fill in. Additional information regarding each item may be found under P14.	Yes	No	n.a
P6		nt information			
P6.1*	Informati	on for recyclers/treatment facilities is available (see legal reference).	\boxtimes		
P7	Design	mbly requeling			
P7.1*		mbly, recycling t have to be treated separately are easily separable			
P7.2*		aterials in covers/housing have no surface coating.			⊢⊢
P7.3*		arts >100g consist of one material or of easily separable materials.			─₩
P7.4*		arts >25g have material codes according to ISO 11469 referring ISO 1043.			- -
P7.5					<u> </u>
		arts are free from metal inlays or have inlays that can be removed with commonly available tools		<u> </u>	<u> </u>
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			
	Product				
P7.7*		g can be done e.g. with processor, memory, cards or drives			<u> </u>
P7.8*		g can be done using commonly available tools			<u> </u>
P7.9.	Spare pa	rts 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:			
P7.12		type: PC+ABS-FR(40) Material type: Material type: I cable insulation materials of power cables are PVC free. Material type: Material type:			
P7.12		I cable insulation materials of signal cables are PVC free	<u> </u>		- 님
		-			<u> </u>
P7.14		/housing plastic parts >25g are free from chlorine and bromine.			<u> </u>
P7.15	Note B2)		See		
P7.16	Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4: <i>FR(40)</i>			
P7.17		I specifications of flame retardants in printed circuit boards >25g (without components): additive) , TBBPA (reactive) , Other; chemical name: , CAS #:			
	Alt. 2 Chemica ISO 1043	l specifications of flame retardants in printed circuit boards (without components) >25g according 3-4: Brominated Epoxy Resin See P14	9		
P7.18	concentr	etarded plastic parts >25g contain the following flame retardant substances/preparations ations above 0.1%: ent: No legal limits exist, this is a market requirement.	in 🗌		
	1. Chemi 2. Chemi 3. Chemi Alt. 2	ical name: , CAS #: ical name: , CAS #: ical name: , CAS #:			
	FR(40)	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:			
P7.19	R40, R46	arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45, 5, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)			
P7.20		plastic parts' weight >25g, recycled material content is 6.10%.			
P7.21		vlastic parts' weight >25g, biobased material content is 0%.			
P7.22	If mercur	rces are free from mercury y is used specify: Number of lamps: and max. mercury content per lamp: mg			
P8 P8.1*	Batteries	s hemical composition: Lithium Ion/Lithium Manganese Dioxide			
					<u> </u>
P8.2	Batteries	meet the requirements of the following voluntary program/s: US RBRC			

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model n	umber *	80R9						
Issue da	ite *	2015-11-04				Logo	lenovo	
Product	onvironmo	ntal attribut	tes - Market requ	uiromonts (cont	inuod)		Requirement me	•
Item			tes - Market requ		inded)		Yes No	
P9	Energy co	nsumption						
9.1	For the pro	oduct the follow	wing power levels or	energy consumpt	ions are reporte	d: See P14		
Energy mo	ode *		Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standar method *	rd for energy modes and test	
Peak (On-	max)		45 W	45 W	45 W	Full load		\boxtimes
Categor	y 1			•	L			
Short Idle	State - WO	L Enabled	7.248 W	7.248 W	7.380 W	Use for ENERGY S	TAR V6 registration (P _{idle})	\square
Long Idle	State - WO	L Enabled	4.944 W	4.944 W	5.028 W	Use for ENERGY S	TAR V6 registration (P _{idle})	1
Sleep (S3)	- WOL Ena	abled	0.540 W	0.552 W	0.576 W	Use for ENERGY S	TAR V6 registration(P _{sleep})	
Sleep (S3)	- WOL Dis	abled	0.540 W	0.552 W	0.576 W	Reference		\square
Off (S5) -	WOL Enabl	ed	0.420 W	0.420 W	0.456 W	Use for ENERGY S	TAR V6 registration(Poff)	\square
Off (S5) - I	WOL Disab	led	0.420 W	0.420 W	0.456 W	Use for EuP		Ē
Categor	v D 1/2							
	State - WO	L Enabled	W	W	W	Use for ENERGY S	TAR V6 registration (Pidle)	
	State - WO		W	W	W		TAR V6 registration (P _{idle})	
	- WOL Ena		W	W	W		TAR V6 registration (P _{sleep})	+-
	- WOL Dis		W	W	W	Reference	in the region at on (r sieep)	┝┤
			W	W	W		TAR V6 registration(P _{off})	┝
	Off (S5) - WOL Enabled Off (S5) - WOL Disabled		W	W	W	Use for EuP		┟¦┤
EPS No-lo		leu	0.053 W	0.056 W	0.095 W	USE IOI LUF		┟╠┥
-	au bower supply	/ charger	0.053 VV	0.050 VV	0.095 VV			
	the wall out							
	ed from the							
PTEC *			W	10/	10/			
	ergy Consur	mption	vv	W	W			
	0,	•						
TEC *			kWh/week	L) A (b (e e l :	LAA/b (we als			
i ypical En	ergy Consur	mption		kWh/week	kWh/week			
ETEC *			25.95 kWh/year	25.99	26.56	E _{TEC} = (8760/1000)	x (P _{off} x 0.25 + P _{sleep} x 0.35	\boxtimes
Annual En	ergy Consur	mption		kWh/year	kWh/year	+ P _{short idle} x 0.3+ P _{lo}	ong idle X 0.1)	
			P : Off Modo(S5)	WOL Enabled: P	: Sloop Modo/S2)	WOL Enabled: R	Idle State - WOL Enabled	-
Display res	solution* : 1	366*768 Meg		VOL LITADICU, T slee		- WOL Linabled, Tidle.	Tule State - WOL Linabled	
Print Spee			per minute					
		-	ode: 25 minutes					
P9.2*			ergy save function is	s provided with the	aproduct			닉믐
P9.3*			nergy requirements	•	•	/c·		
1 0.0			n: Version 6.1 Tie		category: A			
	Others spe	-						
P10	Emissions		ared according to IS	0 9296				
P10.1	Mode		description	0 0200	Declared	Decl	lared A-weighted	T
					A-weighted sound powe		ssure level $L_{p{\sf Am}}$ (dB)	
					level L_{WAd}		n X Bystander positions	1
					WAd V	Deskto		
						or Desk side	e (only if product is not operator attended)	
	Idle	* HDI	D:Idle		* NA		NA	
	Operation		D: Operating		* NA		NA] 🗖
	Other mod							4
	Measured	according to:		CMA-74		I moore momented	liatanaa m)	
P10.2	The produc	ct meets the a	coustic noise requir			L _{pAm} measurement d	listance m)	

Model numb	er*	80R9						
Issue date *		2015-11-04				Logo	lenovo	
Product onvi	ironmo	ntal attribut	tes - Market requ	iromonts (cont	inuod)		Requirement met	•
Item	Ionne		les - Market requ	inements (cont	inueu)		Yes No	n.a.
P9 Ene	ergy cor	sumption						
9.1 For	the proc	duct the follow	ving power levels or	energy consumpt	ions are reporte	d: See P14		
Energy mode *			Power level at 100 V AC	Power level at 115 V AC	Power level at 230 V AC	Reference / Standard method *	for energy modes and test	
Peak (On-max))		45 W	45 W	45 W	Full load		\square
Category I2					•			
Short Idle Stat	te - WOL	. Enabled	6.540 W	6.540 W	6.684 W	Use for ENERGY ST	AR V6 registration (P _{idle})	\square
Long Idle State	e - WOL	Enabled	4.368 W	4.512 W	4.584 W	Use for ENERGY ST	AR V6 registration (P _{idle})	
Sleep (S3) - W	OL Enal	bled	0.432 W	0.432 W	0.492 W	Use for ENERGY ST	AR V6 registration(P _{sleep})	
Sleep (S3) - W	OL Disa	bled	0.432 W	0.432 W	0.492 W	Reference		\square
Off (S5) - WOL	. Enable	d	0.408 W	0.420 W	0.456 W	Use for ENERGY ST	AR V6 registration(Poff)	
Off (S5) - WOL	Disable	ed	0.408 W	0.420 W	0.456 W	Use for EuP		
Category D	1/2							
Short Idle Stat		Enabled	W	W	W	Use for ENERGY ST	AR V6 registration (Pidle)	
Long Idle State			W	W	W		AR V6 registration (P _{idle})	
Sleep (S3) - W			W	W	W		AR V6 registration (P _{sleep})	
Sleep (S3) - W			W	W	W	Reference	(i sieep)	
			W	W	W		AR V6 registration(P _{off})	
	Off (S5) - WOL Enabled Off (S5) - WOL Disabled		W	W	W	Use for EuP		
EPS No-load	Disable	,u	0.053 W	0.056 W	0.095 W	USE IOI LUF		
(External powe	er supply	/ charger	0.053 VV	0.056 VV	0.095 VV			
plugged in the								
disconnected fr								
PTEC *			W	10/	10/			
Typical Energy	Consum	ption	vv	W	W			Ш
,, ,,								
TEC *	C		kWh/week	WA(b (we als				
Typical Energy	Consum	iption		kWh/week	kWh/week			
ETEC *			23.23 kWh/year	23.38	24.09	$E_{TEC} = (8760/1000) x$	$(P_{off} \times 0.25 + P_{sleep} \times 0.35)$	\square
Annual Energy	Consum	ption		kWh/year	kWh/year	+ P _{short idle} x 0.3+ P _{lon}	g idle x 0.1)	
			P : Off Mode(S5)	WOL Enabled: P	: Sloop Modo/S2	- WOL Enabled; P _{idle} : Io	llo Stato - WOL Enabled	
Display resoluti	ion* : 1 :	366*768 Meg		CL LINDIEU, T slee	p. Sleep mode(33)		ie State - WOL Lindbled	
Print Speed *			per minute					
	ontor on	-	ode: 25 minutes					
			ergy save function is	s provided with the	a product			님
			nergy requirements	•	•	/e:		
			n: Version 6.1 Tie		category: A			
	ners spec	cify:						
	nissions	sion - Decla	ared according to IS	2 0206				
P10.1 Mo			description	0 0200	Declared	Decla	red A-weighted	
					A-weighted sound powe		sure level L_{pAm} (dB)	
					level L_{WAd}		Bystander positions	
					WAd V	Desktop		
						or Desk side	(only if product is not operator attended)	
Idle	e	* HDI	D:Idle		* NA		NA	
	eration		D: Operating		* NA		NA	
	ner mode							-
Me	asured a	according to:	<u> </u>	MA-74		1		
P10.2 The	e produc	t meets the a	Other (or coustic noise require			L _{pAm} measurement dis program/s:	stance m)	

Issue dat	e* 2	2015-11-04	Logo	leno	VO.
Product	environm	ental attributes - Market requirements (continued)		Require	ment met
Item		······ (······//		Yes	No n.a
	Chemical	emissions from printing products			
P10.3*		rmed according to ECMA-328 (ISO/IEC 28360) standard , other specify:			
P10.4		nission rate (print phase) is (mg/h):			
		ust Ozone Styrene Benzene TVOC			
P10.5	Chemical	emission requirements of the following voluntary program/s are met for : ist Ozone Styrene Benzene	TVOC		
	= -	agnetic emissions			
P10.6		display meets the requirement for low frequency electromagnetic fields of the fol	lowing voluntary	\square	
P11	Consuma	ble materials for printing products			
P11.1*	A Safety D	Data Sheet (SDS) is available for the ink/toner preparation, even if not legally req	uired (see P4.3).		
P11.2*	Paper cor EN12281.	ntaining post-consumer recycled fibers can be used, provided that it meets t	he requirements	of	
P11.3*	2-sided (d	uplex) printing/copying is an integrated product function.			
P12		ics for computing products			
P12.1*	The displa	ay meets the ergonomic requirements of ISO 9241-307 for visual display technology	ogies.	\boxtimes	
P12.2*	The physic	cal input device meets the requirements of ISO 9995 and ISO 9241-410.		\boxtimes	
P13	Packagin	g and documentation			
P13.1*	Product pa Product pa	ackaging material type(s):Corrugated Cartonweight (kg):0.318ackaging material type(s):Polyethylene Cushionsweight (kg):0.048ackaging material type(s):Othersweight (kg):0.123			
P13.2*		astic packaging is free from PVC.		\square	
P13.3*		edia for user and product documentation (tick box):			
P13.4*	For paper fiber: 0%	user and product documentation, please specify contained percentage of post-c	onsumer recycled	t	
P14		I information (See Note B4)			
	informatio knowledge provided h informatio		nt is provided bas late such informat Account Represe	sed on supp tion. The inf	olier's formation
P9	See Energ	gy Star Qualified Notebooks & Tablet Computers for the latest information: w.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGrou	p&pgw_code=C	0	

Note B4: 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 B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

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 ideapad 100S-14IBR	Logo
Model Number	80R9	
Issue Date	2015-11-04	lenovo
Additional information		

P7.1.1	Product environmental attributes	
(d)	year of manufacture:	2014
(e)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are disabled and if the system is tested with switchable graphics mode with UMA driving the display:	
	Category (according to ErP Lot 3): A Etec: 16.11	
(f)	E TEC value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enabled:	
	Category (according to ErP Lot 3): NA Etec:	
(g)	idle state power demand (Watts);	5.03
(h)	sleep mode power demand (Watts);	0.58
(i)	sleep mode with WOL enabled power demand (Watts) (where enabled);	0.58
(j)	off mode power demand (Watts);	0.46
(k)	off mode with WOL enabled power demand (Watts) (where enabled);	0.46
(I)	internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):	
	10% 20% 50% 100% Average	
(m)	external power supply efficiency (if applicable):	
	Average 45W:88.64%;88.53%;88.40%;	
	*internal note: show values for all available external power supplies	
(0)	the minimum number of loading cycles that the batteries can withstand (applies only to notebook computers):	300 cycles
(p-1)	the measurement methodology used to determine information mentioned in points (I) – internal PSU	
	efficiency: NA	
(p-2)	the measurement methodology used to determine information mentioned in points (m) – external PSU efficiency:	
	Energy-star requirement	
(p-3)	the measurement methodology used to determine information mentioned in points (o) – loadingcycles	
	batteries: IEC 61960 measurement methodology	
	· · · · · · · · · · · · · · · · · · ·	

	the 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:					
	Energy-star requirement					
(q)	sequence of steps for achieving a stable condition with respect to power demand::					
	Based on user manual					
(r)	description of how sleep and/or off mode was selected or programmed:					
Based on user manual						
• •	sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:					
				Based on user manual		
· · /	the 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): 25					
	the 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):					
	the length of time before the display sleep mode is set to activate after user inactivity (in minutes): 10					
	information on the energy-saving potential of power management functionality:					
Based on user manual						
(x)	user information on how to enable the power management functionality:					
Based on user manual						
(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:						
230V/50Hz, Total Harmonic Distortion <2 %						
Addition No	tebook Battery	Information:				
Yes		No	n/a	This notebook computer is operated by battery/ies that cannot replaced by a non-professional user.	be accessed and	
(Battery replaceable)	not user	(Battery user replaceable)		The battery[ies] in this product cannot be easily	replaced by	
				users themselves		
Additional information						