

ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2017)

### Annex B2 - Product environmental attributes Desktop/All-in-One Computers

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  | and the second second second second   |
| Contact information *  | Lenovo Global Environmental Affairs                           | Lenovo  |
| e-mail address         | Alvin L Carter  | LEI IOVO.   |
|                        | alcarter@lenovo.com   | and the second se |
| 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 statement | nts given in this declaration.   |
| Type of product *         | Desktop  |
| Commercial name *         | IdeaCentre 5 14IOB6  |
| Model number *            | 90RJ,90RK  |
| Issue date *              | 2021.3.29  |
| Intended market *         | 🛛 Global 🔲 🗖 Europe 📄 Asia, Pacific & Japan 📄 Americas 🗌 Other                                       |
| Additional information    | NA   |

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 n  | umber *               | 90RJ,90RK Logo   | 1.000       | ~   | 1          |
|----------|-----------------------|--|-------------|-----|------------|
| Issue da | te *                  | 2021.3.29  | Len         | ovo | <b>)</b> _ |
| Product  | t environ             | mental attributes - Legal requirements   | Require     |     | 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)  | $\square$   |     |            |
| P1.2*    | Comme                 | e do not contain Asbestos (see legal reference).<br>nt: Legal reference has no maximum concentration value.  | $\square$   |     |            |
| P1.3*    | hydrobro<br>trichloro | e do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC),<br>pmofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1-<br>ethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum<br>ration values. |             |     |            |
| P1.4*    | terpheny              | e do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated<br>/l (PCT) in preparations (see legal reference).   | $\square$   |     |            |
| P1.5*    | Products<br>chain co  | do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).  | the 🔀       |     |            |
| P1.6*    | (see leg              | h direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/we<br>al reference).<br>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):<br>www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure  |             |     |            |
| P2       | Batterie              | S  |             |     |            |
| P2.1*    |                       | duct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal<br>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 leg   | gal 🔀       |     |            |
| P2.3*    | Batteries             | and accumulators are readily removable. (See legal reference)  | $\boxtimes$ |     |            |
| P3       | Conform               | nity verification & Eco design (ErP)   |             |     |            |
| P3.1*    |                       | duct is CE-marked to show conformance with applicable legal requirements (see legal reference)<br>laration of Conformity can be requested at: https://www.lenovo.com/us/en/compliance/eu-do  |             |     |            |
| P3.2*    |                       | luct complies with the Eco design requirements for energy-related products,<br>al reference).  | $\square$   |     |            |
|          | Required              | d information is; given in item P15 or added to this document, available at: https://www.lenovo.com/us/en/compliance/eco-  | $\square$   |     |            |
|          | declara               |  |             |     |            |
| P5       |                       | packaging  |             |     |            |
| P5.1*    | Packagii              | ng and packaging components do not contain more than 0,01% lead, mercury, cadmium<br>ant chromium by weight of these together.   | and 🔀       |     |            |
| P5.2*    | The pac               | kaging materials are marked with abbreviations and numbers indicating the nature of the materia<br>e legal reference).   | ll(s) 🔀     |     |            |
| P5.3*    | The proc<br>(see lega | luct packaging material is free from ozone depleting substances as specified in the Montreal Proto<br>al reference).<br>ht: Legal reference has no maximum concentration values.   | ocol 🔀      |     |            |
| 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 *              | 90RJ,90RK  | Logo             | Lon         | -         |           |
|-----------|----------------------|--|------------------|-------------|-----------|-----------|
| Issue dat | te *                 | 2021.3.29  |                  | Len         | ove       | -         |
| 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.      |
| P7.1*     |                      | Disassembly, recycling<br>at have to be treated separately are easily separable  |                  |             |           |           |
| P7.2*     |                      | naterials in covers/housing have no surface coating.   |                  |             | <u> </u>  |           |
| P7.2      |                      |  |                  |             | <u> </u>  |           |
| P7.3*     | -                    | parts > 100 g consist of one material or of easily separable materials.  |                  |             | <u> </u>  |           |
|           | •                    | parts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.  |                  |             | <u> </u>  |           |
| P7.5      |                      | parts are free from metal inlays or have inlays that can be removed with commonly a  | available tools. |             | <u>Ц</u>  |           |
| P7.6*     |                      | re easily separable. (This requirement does not apply to safety/regulatory labels).  |                  |             |           |           |
| P7.7*     |                      | l lifetime   |                  |             |           |           |
|           |                      | ng can be done e.g. with processor, memory, cards or drives  |                  |             | <u> </u>  | <u> </u>  |
| P7.8*     | 10                   | ng can be done using commonly available tools  |                  | $\bowtie$   |           |           |
| P7.9      |                      | arts are available after end of production for: 5 years  |                  |             |           |           |
| P7.10     |                      | is available after end of production for: 5 years  |                  |             |           |           |
|           |                      | and substance requirements   |                  |             |           |           |
| P7.11*    |                      | cover/housing material type (e.g. plastics, metal, aluminum):<br>type: ABS Material type: PC+ABS Materia   | al type: SGCC    |             |           |           |
| P7.12     |                      | n materials of external electrical cables are PVC free.  | artype. 3600     |             |           |           |
| P7.13     |                      | n materials of internal electrical cables are PVC free.  |                  |             |           | $\square$ |
| P7.14     |                      | plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b  | romine and 0.10  |             |           |           |
| 1 7.14    | weight(<br>polyvinyl | 1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame<br>I chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in<br>an 25% post-consumer recycled content.   | e retardants, an | d 🗖         |           |           |
| P7.15     |                      | circuit boards, PCBs (without components) are low halogen: all 🔀 PCBs > 25 g 📃<br>ed in IEC 61249-2-21. (See 1NOTE B2)   | are low haloge   | n           | $\square$ |           |
| P7.16     | Marking:             |  |                  |             |           | $\square$ |
| P7.17     |                      | hemical specifications of flame retardants in printed circuit boards > 25 g (without co  |                  |             | _         |           |
|           | TBBF                 | PA (additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #: <b>79-94</b>  | -7               | $\boxtimes$ |           |           |
|           |                      | hemical specifications of flame retardants in printed circuit boards (without compone<br>g ISO 1043-4:   | ents) > 25 g     |             |           |           |
| P7.18     | <u>Alt. 1: </u> Fl   | lame retarded plastic parts > 25 g contain the following flame retardant substance   | s/preparations i | n           |           |           |
|           | 1. Chem              | rations above 0,1%:<br>nical name: , CAS #: (See NOTE B4)<br>nical name: , CAS #: "  |                  |             |           |           |
|           |                      | ical name: , CAS #: "  |                  |             |           |           |
|           | Alt 2. Cl            | hemical specifications of flame retardants in plastic parts > 25 g according ISO 1043  | 3-4∙             |             |           |           |
| P7.19     |                      | c parts > 25 g, flame retardant substances/preparations above 0,1% are used which  |                  | - H         | H         |           |
|           |                      | d the following Risk phrases; and Hazard statements:   |                  |             |           |           |
|           | 0                    |  | See note B5)     |             |           |           |
| P7.20*    |                      | sumer recycled plastic material content is used in the product (See Note B6):  | /                | $\square$   |           |           |
|           | a) Of t<br>a p<br>or | at least one of the two alternatives below shall be answered;<br>total plastic parts' weight > 25 g, the postconsumer recycled plastic material conten<br>ercentage of total plastic by weight) is <i>13.6</i> %.<br>e weight of recycled material is <i>26</i> 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 * Issue date * | 90RJ,90RK<br>2021.3.29                              | Logo | Lenovo          |
|-----------------------------|---|------|-----------------|
| Product environr            | nental attributes - Market requirements (continued) |      | Requirement met |

Item

Requirement metYesNon.a.

|   | Material and s   | ubstance requirements                             | (continued)              |                               |   |
|---|--|---|--------------------------|-------------------------------|---|
| P7.21*  |  | c material content is used                        |                          | OTE B7):                      |   |
|   |  | one of the two alternative                        |                          |                               |   |
|   |  | astic parts' weight > 25 g,<br>c by weight) is %. | the biobased plastic m   | naterial content (calcula     | ited as a percentage of   |
|   | or<br>b) The weigh   | t of the biobased plastic r                       | material is a.           |                               |   |
| P7.22*  | Light sources a  | re free from mercury, i.e.                        | less than 0,1 mg/lamp    |                               |   |
| -   |  | ed specify: Number of lar                         | nps: and maxim           | num mercury content pe        | er lamp: mg   |
| P8.1*   | Batteries  | al composition: <i>Lithium I</i>                  | langanaga Diavida        |                               |   |
| -   |  |   | langanese Dioxide        |                               |   |
| <b>P9</b><br>P9.1                                 | Energy consul  | mption (See NOTE B8)<br>the following power level | s or energy consumpti    | ons are reported:             |   |
| Energy m  | ode *  | Power level at                                    | Power level at           | Power level at                | Reference/Standard for energy   |
| Lineigy in  |  | 100 V AC  | 115 V AC                 | 230 V AC                      | modes and test method *   |
| Peak (On  | n-max)   | W   | W                        | W                             | Full load   |
| <u>Catego</u>                                     | <u>ry  2</u>   |   |                          |                               |   |
| Short Idle  | State - WOL Enable   | d 12.83 W   | 12.59 W                  | 12.72 W                       | Reference (P <sub>idle</sub> )  |
| Long Idle   | State - WOL Enable   | d 9.93 W  | <b>10.48</b> W           | 9.63 W                        | Reference (P <sub>idle</sub> )  |
| Sleep (S3)  | - WOL Enabled  | 0.97 W  | 0.91 W                   | 1 W                           | Reference (P <sub>sleep</sub> )   |
| Off (S5) - V                                      | NOL Enabled  | 0.54 W  | 0.53 W                   | 0.59 W                        | Reference (P <sub>off</sub> )   |
| Category I  | <u>D2</u>  |   |                          |                               |   |
| Short Idle  | State - WOL Enable   | d 20.69 W   | 20.66 W                  | 20.29 W                       | Reference (P <sub>idle</sub> )  |
| Long Idle   | State - WOL Enable   | d 16.71 W   | 16.88 W                  | 16.69 W                       | Reference (P <sub>idle</sub> )  |
|   | - WOL Enabled  | 0.97 W  | 0.98 W                   | <b>1</b> W                    | Reference (P <sub>sleep</sub> )   |
| Off (S5) - V                                      | NOL Enabled  | 0.54 W  | 0.54 W                   | 0.58 W                        | Reference (P off)   |
| EPS No-le<br>(External power<br>wall outlet but d | oad<br>r supply / charger plugged in<br>lisconnected from the produc | the<br>t.)  | W                        | W                             |   |
| PTEC *  | nergy Consumptio   | W   | W                        | W                             |   |
| ETEC *  |  | 12:46.95 kWh/year                                 | 12:46.55 kWh/year        | 12:46.58 kWh/year             | E <sub>TEC</sub> = (8760/1000) x (P <sub>off</sub> x 0.45                                   |
| Annual Ei   | nergy Consumptio   | n <b>D2:73.54</b> kWh/year                        | <b>D2:73.65</b> kWh/year | D2:72.65 kWh/year             | + $P_{sleep} \times 0.05$ + $P_{long_ldle} \times 0.15$ +<br>$P_{short_ldle} \times 0.35$ ) |
|   |  |   |                          |                               | Enabled; Pidle: Idle State - WOL Enabled  |
|   |  | iency Level (Internationa                         | Efficiency Marking Pro   | otocol) * :                   |   |
| Display re  | esolution * :  | megapixels  |                          |                               |   |
| Default tir                                       | me to enter energy   | save mode: 25 minutes                             |                          |                               |   |
| P9.2*   | Information abo  | out the energy save functi                        | on is provided with the  | product.                      |   |
| P9.3  | Energy efficience  | cy class (monitors only):                         | VA                       |                               |   |
| P10   | Emissions  |   |                          |                               |   |
| <b>D</b> 40.4                                     |  | n – Declared according to                         | ISO 9296 (See NOTE       |                               |   |
| P10.1   | Mode   | Mode description * HDD:Idle                       |                          |                               | it A-weighted sound power level, <i>L</i> <sub>WA,c</sub> (B)                               |
|   | Idle   |   |                          | * 3.3                         | <u>⊢</u> _  |
|   | Operation<br>Other mode  | * HDD: Operating<br>Declared A-weighted soun      | d pressure level (dB) 1  | * 3.4<br>22 (operator positio | n desktop – idle)   |
|   | Other mode   | Declared A-weighted soun                          |                          |                               | on desktop – operating)   |
|   |  | rding to: 🔀 ISO 7779                              | ECMA-74                  |                               |   |
|   |  | Other   | (only if not covered by  | ECMA-74)                      |   |
|   | 1  |   | (only if not covered by  |                               |   |

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 nur  | mber *   | 90RJ,9  | 90RK   |  |  |   |                                      | L  | ogo   | 000                       |                   |           |
|------------|--|---|--|--|--|---|--------------------------------------|--|---|---------------------------|-------------------|-----------|
| Issue date | e *  | 2021.3  | . 29   |  |  |   |                                      |  |   | Leno                      | vo                | -         |
| Product    | environ  | mental  | attributes - Mark  | et requirem  | nents (c                                   | ontinu                                    | ued)                                 |  |   | Require                   | ment              | met       |
| Item       |  |   |  |  |  |   |                                      |  |   | Yes                       | No                | n.a.      |
|            |  |   | c emissions  |  |  |   |                                      |  |   |                           |                   |           |
| P10.4      | progran  | า(s):   |  |  | frequency                                  | electro                                   | omagnetio                            | c fields of the follow                         | ing voluntary                                     |                           |                   | $\square$ |
| P12        |  |   | r computing produ  |  |  |   |                                      |  |   |                           |                   |           |
| P12.1*     |  |   | 0  | 1  |  |   |                                      | display technologie                            | s.  |                           |                   | $\square$ |
| P12.2*     | The phy  | /sical inp  | ut device meets the  | requirements   | s of ISO 9                                 | 995 ar                                    | nd ISO 92                            | 41-410.  |   |                           | $\boxtimes$       |           |
| P13        | Packag   | ing and   | documentation  |  |  |   |                                      |  |   |                           |                   |           |
| P13.1*     | Product<br>Product                                 | : packagi<br>: packagi                                    | ng material type(s):<br>ng material type(s):<br>ng material type(s): | LEPE<br>Corrugated                                   | weight (<br>single wa                      | (kg): <mark>0</mark> .                    | 32                                   | ght (kg): <b>0.96</b><br>ght (kg): <b>0.11</b> |   |                           |                   |           |
| P13.2*     | Product  | plastic p   | primary packaging is   | s free from PV                                       | ′C.  |   |                                      |  |   | $\square$                 |                   |           |
| P13.3*     | consum   | ier recov   | ered fiber content:  | <mark>30</mark> %                                    | 0 0/ 1                                     | ,   | he contai                            | ned percentage of                              | minimum pos                                       | it-                       |                   |           |
| P13.4*     |  |   | or user and product<br>Paper, Other                                  | documentatio   | n (tick bo                                 | x):                                       |                                      |  |   |                           |                   |           |
| P13.5      | Ùser an  |   | nplete this item if pa<br>of documentation or<br>pecify:             |  |  |   |                                      |  |   |                           |                   |           |
|            | Totally  | chlorine-   | free   |  |  |   |                                      |  |   | $\boxtimes$               |                   |           |
|            | Elemen   | tal chlori  | ne-free  |  |  |   |                                      |  |   |                           |                   |           |
|            | Process  | sed chlor   | ine-free   |  |  |   |                                      |  |   |                           |                   |           |
| P14        | Volunta  | ary prog  | rams   |  |  |   |                                      |  |   |                           |                   |           |
| P14.1      | The pro  | duct me   | ets the requirement  | s of the follow                                      | ing volun                                  | tary pro                                  | ogram(s):                            |  |   |                           |                   |           |
|            | ENERG  | Y STAR  | ® Criter   | ia version:  |  | Dat                                       | te:                                  | Product cate                                   | egory:  |                           |                   |           |
|            | Eco-lab  |   |  | ia version:  |  | Da  |                                      | Product cate                                   | 0,  |                           |                   |           |
| B45        | Eco-lab  |   |  | ia version:  |  | Dat                                       | te:                                  | Product cate                                   | egory:  |                           |                   |           |
| P15        |  |   | rmation (See NOTI  |  |  | w daa                                     | orintion                             | of the tested produ                            | et configurat                                     | ioni                      |                   |           |
| гэ         |  |   |  | Memory   | HDD  | ssD                                       | Graphics                             | power supply                                   | Sleep mo  |                           |                   |           |
|            | item   | Category  |  | Memory   |  | COD                                       | Graphics                             | power suppry                                   | Olcep mo  | de                        |                   |           |
|            |  | 12 D2   | i5-11500<br>i7-11700F  | 32GB   | 2TB<br>3.5"HDD                             | 1TB                                       | DIS&UMA                              | 260W   | S3  |                           |                   |           |
| P9         | informa<br>knowled<br>provide<br>informa<br>See En | tion cont<br>lge avail<br>d here is<br>tion.<br>ergy Stai | ained in this docum<br>able at the time of c<br>approximate and p    | ent. All inform<br>completion, an<br>rovided for inf | ation pro-<br>id supplie<br>formationation | vided b<br>r shall<br>al purpo<br>for the | y supplied<br>have no c<br>oses only |  | s provided bas<br>such informati<br>ount Represer | ed on supp<br>on. The inf | olier's<br>format | ion       |
|            | nup://w  | ww.ener   | gystar.gov/index.cfn   | refuseaction=  | hinu_a_pi                                  | JULICI.                                   | SHOWPFOO                             | luctGroup&pgw_coo                              |   |                           |                   |           |

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) *<br>* Specific exemptions apply for certain products and<br>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<br>(Marketing and use of Ozone layer depleting<br>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<br>Directive) *<br>* These provisions shall not apply where, for safety,<br>performance, medical or data integrity reasons, continuity of<br>power supply is necessary and requires a permanent<br>connection between the appliance and the battery or<br>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)<br>No 1275/2008 with regard to ecodesign requirements<br>for standby, off mode electric power consumption of<br>electrical and electronic household and office<br>equipment, and amending Regulation (EC) No<br>642/2009 with regard to ecodesign requirements for<br>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        | IdeaCentre 5 14IOB6 | Logo   |
|------------------------|---------------------|--------|
| Model Number           | 90RJ,90RK           | Lenovo |
| Issue Date             | 2021.3.29           | Lenovo |
| Additional information | NA                  |        |

| (d)  | year of manufacture:   |   |  |  | 2021                                   |
|--|--|---|--|--|--|
| e)   | Etec value (kWh) per ErP Lot 3 Catego<br>disabled and if the system is tested with   |   |  |  | cards (dGfx) are                       |
| f)   | Etec value (kWh) per ErP Lot 3 Categor<br>enable   | ry and capability adjust                  | ments applied when <b>a</b>            | II discrete graphics o                 | cards (dGfx) are                       |
|  |  | Category A<br>(according to ErP Lot 3)    | Category B<br>(according to ErP Lot 3) | Category C<br>(according to ErP Lot 3) | Category D<br>(according to ErP Lot 3) |
|  | Memory over base [GB]  |   |  |  | 28                                     |
| ents<br>ting                                     | Additional internal storage  | (Yes / No)                                | (Yes / No)                             | (Yes / No)                             | Yes<br>(Yes / No)                      |
| capability adjustments<br>applied during testing | Discrete television tuner  | (Yes / No)                                | (Yes / No)                             | (Yes / No)                             | No<br>(Yes / No)                       |
| ability a<br>lied du                             | Discrete Audio Card  | (Yes / No)                                | (Yes / No)                             | (Yes / No)                             | No<br>(Yes / No)                       |
| app  | Discrete graphics Card(s) [number / #]   | #:<br>(Yes / No)                          | #:<br>(Yes / No)                       | #:<br>(Yes / No)                       | Yes #: 1<br>(Yes / No)                 |
|  | Category of discrete graphics Card(s)  |   |  |  | G3                                     |
| esults   | Etec Value (kWh) - dGfx disabled<br>all discrete graphics cards (dGfx) are disabled/<br>UMA is active for switchable graphics/<br>product has no graphics cards (dGfx) |   |  |  | 55.99                                  |
| Test results                                     | Etec Value (kWh) - dGfx enabled<br>all discrete graphics cards (dGfx) are enabled  |   |  |  | 79.49                                  |
| g)   | Idle state power demand (Watts);   |   |  |  | 21.75                                  |
| h)   | Sleep mode power demand (Watts);   |   |  |  | 0.88                                   |
| i)   | Sleep mode with WOL enabled power d  | emand (Watts) (where                      | enabled);                              |  | 0.88                                   |
| j)   | Off mode power demand (Watts);   |   |  |  | 0.6                                    |
| (k)  | Off mode with WOL enabled power dem  | and (Watts) (where en                     | abled);                                |  | 0.42                                   |
| (I)  | Internal power supply efficiency at 10 %   | , 20 %, 50 % and 100 9                    | % of rated output pow                  | er (if applicable):                    |  |
|  | 10% <b>85.61%</b> 20% <b>86.23%</b> 50% <b>86</b> .  | <b>98%</b> 100% <b>84.26%</b>             | Average <b>85.77%</b>                  |  |  |
| m)   | External power supply efficiency (if appli   | cable)*:                                  |  |  |  |
|  | Average active efficiency: N/A   |   |  |  |  |
|  | *internal note: show values for all available external p   |   |  |  |  |
| (0)  | Minimum number of loading cycles that  | the batteries can withst                  | and (applies only to n                 | otebook computers):                    | NA                                     |
| (p-1)  | Measurement methodology used to dete   | ermine information men<br>80 plus program |  | nternal PSU efficiency:                | :                                      |
| (p-2)  | Measurement methodology used to dete   | ermine information men                    | tioned in points (m) –                 | external PSU efficience                | cy:                                    |

| (p-3) | Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries:<br>NA  |    |
|-------|--|----|
| (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:  |    |
|       | refer to IEC62623:2013-Desktop and notebook computers-Measurement of energy consumption  |    |
| (q)   | Sequence of steps for achieving a stable condition with respect to power demand:   |    |
|       | Based on user manual/Power on->Wait 5 minutes->Stable condition  |    |
| (r)   | Description of how sleep and/or off mode was selected or programmed:   |    |
|       | Based on user manual-Set power button behaviors  |    |
|       | Set power button behaviors   |    |
|       | You can define what the power button does according to your preference. For example, by pressing the power button, you can turn off the computer or put the computer to sleep or hibernation mode.         |    |
|       | To change what the power button does:  |    |
|       | 1. Go to Control Panel and view by large icons or small icons.   |    |
|       | <ol> <li>Click Power Options → Choose what the power buttons do.</li> </ol>  |    |
|       | 3. Change the settings as you prefer.  |    |
| (s)   | Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:  |    |
|       | Based on user manual/Control Panel->Power Options-> Change Settings-> Restore default settings<br>for this plan  |    |
| (t)   | Duration of idle state condition before the computer automatically reaches sleep mode, or another<br>condition which does not exceed the applicable power demand requirements for sleep mode (in minutes): | 25 |
| (u)   | Length of time after a period of user inactivity in which the computer automatically reaches a power<br>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):  | 10 |
| (w)   | Information on the energy-saving potential of power management functionality:  |    |
|       | NA   |    |
| (x)   | User information on how to enable the power management functionality:  |    |
|       | Based on user manual-Set the power plan  |    |
|       | Set the power plan   |    |
|       | For ENERGY STAR <sup>®</sup> compliant computers, the following power plan takes effect when your computers have been idle for a specified duration:   |    |
|       | Table 1. Default power plan (when plugged into ac power)   |    |
|       | Turn off the display: After 10 minutes   |    |
|       | Put the computer to sleep: After 25 minutes  |    |
|       | To awaken the computer from Sleep mode, press any key on your keyboard.  |    |
|       | To reset the power plan to achieve the best balance between performance and power saving:  |    |
|       | 1. Go to Control Panel and view by large icons or small icons.   |    |
|       | 2. Click <b>Power Options</b> , and then choose or customize a power plan of your preference.  |    |

|   | used for electrical te  |  | rmation and documentation on the ins   | שי שווט טוטעונא               |     |
|---|---|--|--|-------------------------------|-----|
|   |   | Test ve  | oltage in V and frequency in Hz: 23  | 0V/50Hz                       |     |
|   |   | Total harr   | nonic distortion of the electricity supply sys   | ntem: <u>5</u> 2%             |     |
|   | Instrument  | Name   | Range Used or ******   | Make and Model**              |     |
|   | AC Power  | Source   | 1~300VAC;1~550Hz; 1000VA   | NF; EC1000S                   |     |
|   | Power N   | leter  | 1~500V;0~20A   | YOKOGAWA; WT310               |     |
|   | Digital W   | /atch  | Full Range   | CASIO; HS-70W                 |     |
|   | Ambient M   | Ionitor  | -10~60℃; 0~100&RH  | Testo; 622                    |     |
| l   | Anemor  | neter  | 0~20m/s  | Testo; 425                    |     |
|   |   |  |  |                               |     |
| Additional  | Notebook Batter   |  |  |                               |     |
|   |   | The battery[ie   | <b><u>not</u></b> user replaceable<br>(as) in this product cannot be easily<br>sers themselves. <sup>1)</sup>  | Battery[ies] user replaceable | n/a |
| Internal/bui  | It-in Battery   |  |  |                               |     |
| External/de   | tachable Battery  |  |  |                               |     |
| Bios Backu  | p Battery   | $\boxtimes$  |  |                               |     |
| Other:  |   |  |  |                               |     |
| Additional in   | nformation  |  |  |                               |     |
| /мулаторната[и<br>s baterías de es<br>měnu baterie/ba<br>igeren kan ikke<br>r Akku/die Akku<br>sutajad ei saa s | ste producto no pueden s<br>aterií v tomto výrobku by<br>uden videre udskifte bal<br>is dieses Produkts kann/<br>selle toote akut/akusid ise<br>to προϊόν αυτό δεν μπορ | родукт не може да<br>ser sustituidas fácilr<br>neměli provádět sa<br>tteriet/batterierne i d<br>können nicht ohne<br>e hõlpsasti asendad | а се замени[ят] лесно от самите потребител<br>nente por los propios usuarios.<br>mi uživatelé.<br>Jette produkt.<br>weiteres vom Benutzer selbst ausgetauscht w<br>la. | erden.                        |     |