

Technical Documentation of (EU) No 617/2013

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| Product type | Notebook computer |
| Product category | A |
| Manufacturer name, address | Acer Italy s.r.l, Via Lepetit, 40, 20020 Lainate (MI) Italy |
| Product model number | Aspire R5-431T; Aspire R5-471T. |
| Year of manufacture | 2015 |
| E_{TEC} allowance with capability adjustments when discrete graphics cards are disabled | 41.6 kWh/year |
| E_{TEC} allowance with capability adjustments when discrete graphics cards are enabled | Not applicable |
| E_{TEC} allowance with capability adjustments when discrete graphics cards are disabled | 33.6 kWh/year |
| E_{TEC} allowance with capability adjustments when discrete graphics cards are enabled | Not applicable |
| Whether all discrete graphics card are enabled during the test | Not applicable |
| Whether switchable graphics mode with UMA is driving the display during the test | Not applicable |
| E_{TEC} of highest power-demanding | 20.31 kWh/year |
| Idle state power demand | 6.9632 Watt |
| Sleep mode power demand | 0.4068 Watt |
| Sleep mode with WOL enabled power demand | Not applicable |
| Off mode power demand | 0.3144 Watt |
| Off mode with WOL enabled power | Not applicable |
| Maximum power demand | Not applicable |
| Internal power supply (IPS) efficiency at 10 %, 20 %, 50 % and 100 % of rated output power | Not applicable |
| External power supply's (EPS) average active efficiency | 89.00% |
| Noise levels (the declared A-weighted sound power level, $L_{WA(d)}$) of idle mode | 4.88 B |
| Noise levels (the declared A-weighted sound power level, $L_{WA(d)}$) of "HDD random seek" mode | Not applicable |

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| Minimum number of loading cycles that the batteries can withstand | 400 cycles |
| Configuration of memory | 8 GB |
| Configuration of internal storage | 1 piece |
| Configuration of discrete television tuner | 0 piece |
| Configuration of discrete audio card | 0 piece |
| Configuration of discrete graphics cards | 0 piece |
| Configuration of discrete graphics cards category | Not applicable |
| The external package of the notebook provides the information, "The battery in this product cannot be easily replaced by users themselves." | Yes |
| For products with an integrated display, the total content of mercury is | 0 mg |
| Measurement methodology for ETEC | 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: ANNEX II Ecodesign requirements and timetable: 1.3.1. E_{TEC} formula. |
| Measurement methodology for idle mode | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.4. Measuring long idle mode; 5.7. True RMS watt meter specification; 5.8. True RMS watt meter accuracy; Annex E.2 (informative) ENERGY STAR® V5 compliant testing methodology. |

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| <p>Measurement methodology for sleep mode</p> | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.3. Measuring sleep mode; 5.4. Test conditions; 5.7. True RMS watt meter specification; 5.8. True RMS watt meter accuracy.</p> |
| <p>Measurement methodology for off mode</p> | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.2. Measuring off mode; 5.4. Test conditions; 5.7. True RMS watt meter specification; 5.8. True RMS watt meter accuracy.</p> |
| <p>Measurement methodology for IPS efficiency</p> | <p>Not applicable</p> |
| <p>Measurement methodology for EPS efficiency</p> | <p>EN 50563:2011 External a.c.—d.c. and a.c.—a.c. power supplies — Determination of no-load power and average efficiency of active modes.</p> |

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| <p>Measurement methodology for noise level</p> | <p>ECMA-109 2nd edition (December 1987) Declared Noise Emission Values of Computer and Business Equipment: 4. Determination of the declared noise emission values.</p> <p>ECMA-74 11th edition (December 2010) Measurement of Airborne Noise emitted by Information Technology and Telecommunications Equipment: 5. Installation and operating instructions; 6. Method for determination of sound power levels of equipment in reverberation test rooms; 7. Method for determination of sound power levels of equipment under essentially free-field conditions over a reflecting plane;</p> <p>Annex C.15 Equipment category: personal computers and workstations.</p> |
| <p>Measurement methodology for battery loading cycles</p> | <p>EN 61960:2011 Secondary cells and batteries containing alkaline or other non-acid electrolytes — Secondary lithium cells and batteries for portable applications: 7.6.1 General; 7.6.3 Endurance in cycles (accelerated test procedure).</p> |
| <p>Sequence of steps for achieving a stable condition with respect to power demand</p> | <p>EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.2. Measuring off mode; 5.3.3. Measuring sleep mode; 5.3.4. Measuring long idle mode.</p> |

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| Description of how sleep mode was selected or programmed | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.3. Measuring sleep mode. |
| Description of how off mode was selected or programmed | EN 62623:2013 — Desktop and notebook computers — Measurement of energy consumption: 5.2. Test setup; 5.3.2. Measuring off mode. |
| Sequence of events required to reach the mode where the equipment automatically changes to sleep mode | ENERGY STAR® Program Requirements Product Specification for Computers, Eligibility Criteria Version 6.0, Rev. Oct-2013: 1.D.4 Sleep Mode. |
| Sequence of events required to reach the mode where the equipment automatically changes to off mode | Not applicable |
| 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 | 30 minutes |
| 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 | 30 minutes |
| The length of time before the display sleep mode is set to activate after user inactivity | 10 minutes |
| User information on the energy-saving potential of power management functionality | http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users |

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| User information on how to enable the power management functionality | http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_users |
| Test parameter for ambient temperature | 25 °C |
| Test parameter for test voltage | 230 V |
| Test parameter for frequency | 50 Hz |
| Test parameter for total harmonic distortion of the electricity supply system | 3 % |
| Test parameter for information and documentation on the instrumentation, set-up and circuits used for electrical testing | Digital Power Meter: YOKOGAWA WT210 PROGRAMMABLE AC SOURCE: CHROMA 61602 |