



MARKETING NAME.....Latitude E6540  
REGULATORY MODEL.....P29F  
REGULATORY TYPE.....P29F001  
EFFECTIVE DATE.....June 07, 2013  
EMC EMISSIONS CLASS.....B

Dell Inc.  
[www.dell.com](http://www.dell.com)

## TABLE OF CONTENTS

I.	GLOBAL ENVIRONMENTAL INFORMATION .....	2
II.	NFPA 99 CONFORMITY .....	2
III.	POWER CORDS AND USER DOCUMENTATION.....	2
IV.	DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS.....	2
V.	TRADE (IMPORT/EXPORT) COMPLIANCE DATA.....	2
VI.	SYSTEM DIMENSION AND WEIGHT .....	2
VII.	PERFORMANCE DATA (ErP Lot 3 information is located in section XIV Appendix A) .....	2
VIII.	PRODUCT MATERIALS INFORMATION .....	3
IX.	PACKAGING.....	4
X.	BATTERIES .....	4
XI.	DESIGN FOR ENVIRONMENT .....	4
XII.	RECYCLING/ END-OF-LIFE SERVICE INFORMATION .....	4
XIII.	HELPFUL LINKS.....	4
XIV.	APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information .....	5

## STATEMENT OF COMPLIANCE

This product has been determined to be compliant with the applicable standards, regulations, and directives for the countries where the product is marketed. The product is affixed with regulatory marking and text as necessary for the country/agency. Generally, Information Technology Equipment (ITE) product compliance is based on IEC and CISPR standards and their national equivalent such as Product Safety, IEC 60950-1 and European Norm EN 60950-1 or EMC, CISPR 22/CISPR 24 and EN 55022/55024. Dell products have been verified to comply with the EU RoHS Directive 2011/65/EU. Dell products do not contain any of the restricted substances in concentrations and applications not permitted by the RoHS Directive.

EMC Emissions Class refers to one of the following use environments:

- EMC Class B products are intended for use in residential/domestic environments but may also be used in non-residential/non-domestic environments.
- EMC Class A products are intended for use in non-residential/non-domestic environments. Class A products may also be utilized in residential/domestic environments but may cause interference and require the user to take adequate corrective measures.

For Product Safety and EMC compliance, this product has been assigned a unique regulatory model and regulatory type that is imprinted on the product labeling to provide traceability to the regulatory approvals noted on this datasheet. This datasheet applies to any product that utilizes the assigned regulatory model and type including marketing names other than those listed on this datasheet. ErP compliance is tied to the CE mark.

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, 1907/2006) is the European Union's (EU) chemical substances regulatory framework. Dell complies with the REACH directive. For information on SVHC (Substances of Very High Concern), see [www.dell.com/REACH](http://www.dell.com/REACH).

Compliance documentation, such as certification or Declaration of Compliance for the product is available upon request to [regulatory\\_compliance@dell.com](mailto:regulatory_compliance@dell.com) . Please include product identifiers such as marketing name, regulatory module, regulatory type and country that compliance information is needed in request.



## I. GLOBAL ENVIRONMENTAL INFORMATION

Environmental (Voluntary Marks)		
Country	Approval	Compliance
China	CEC	YES
China	CECP	YES
China	CEL	Class 1
Global	Energy Star	Energy Star 5.2
Varies by country – see link below	EPEAT	Gold
South Korea	E-standby	YES
Mexico	MEL	YES
California of the USA	BCS	YES
India	Bee Star	YES
Taiwan	Green Mark	YES

## II. NFPA 99 CONFORMITY

Select Dell systems have been tested and found to comply with the touch current requirements as defined in 10.3.5 of National Fire Protection Association standard NFPA 99:2012. The touch current does not exceed 100  $\mu$ A with ground wire intact (if a ground wire is provided) and 500  $\mu$ A with ground disconnected at 127 V AC, 60 Hz when tested in accordance with 10.3.5 of NFPA 99: 2012. To determine if this product complies with the above requirements, send a request to [regulatory\\_compliance@dell.com](mailto:regulatory_compliance@dell.com). Please include product identifiers such as marketing name, regulatory type and country for which compliance information is needed.

## III. POWER CORDS AND USER DOCUMENTATION

Dell products are provided with the power cord and user documentation suitable for the intended country of delivery. Products that are relocated to other countries should use nationally certified power cords and plugs to ensure safe operation of the product. Contact Dell to determine if alternate power cords or user documentation in other languages is available for your market.

## IV. DATASHEET RESPONSIBLE PARTY NAME AND ADDRESS

Dell Inc.  
Department: Global Regulations and Standards  
MS: PS4-30  
Round Rock, Texas 78682, USA  
[Regulatory\\_Compliance@Dell.com](mailto:Regulatory_Compliance@Dell.com)

## V. TRADE (IMPORT/EXPORT) COMPLIANCE DATA

For any questions related to importing & exporting classification of Dell products, please obtain information from the following link: [www.dell.com/import\\_export\\_compliance](http://www.dell.com/import_export_compliance) or send request to [WW\\_Export\\_Compliance@dell.com](mailto:WW_Export_Compliance@dell.com)

## VI. SYSTEM DIMENSION AND WEIGHT

Depth, mm/cm	Width, mm/cm	Height, mm/cm	Weight, kg
379 mm	250.5 mm	35.8 mm	2.916Kg (depending upon installed options)

## VII. PERFORMANCE DATA (ErP Lot 3 information is located in section XIV Appendix A)



## VIII. PRODUCT MATERIALS INFORMATION<sup>1</sup>

Information on Dell's material use is available [here](#).

To review Dell's Restricted Material Guidance document click [here](#).

- The case material is, > LCD cover: Mg-Al ; LCD bezel: PC+ABS+TPU ; Logic upper: PC ; Logic lower: Mg-Al <
- This product contains 0% post-consumer recycled plastic
- Marking of plastic parts greater than 25 grams are done in accordance with ISO 11469 (see below)

Product is BFR/PVC Free  Yes  No

### Flame Retardants Used in Motherboard

Part	Flame Retardant
Motherboard	2-6% (DOPO)
Motherboard	9,10-Dihydro-9-oxa-10-phosphaphenanthrene 10-oxide
Motherboard	2-6 % ( P series flame retardant)

### Flame Retardants Used in Mechanical Plastic Parts > 25 grams

Resin Material Name	Marking per ISO 11469:2000, 11469:1996	Flame Retardant Marking per ISO 1043-4 (i.e. FR(16), FR(40), etc.)	Flame Retardant (i.e. TBBPA, triaryl phosphate ester, etc.)	List applicable R-Phrase(s) or Hazard Statement(s) per EU Directive 67/548/EEG or 1272/2008
PC	>PC<	N/A	N/A	N/A
PC+ABS+TPU	>TPU, PC-ABS-I-FR(40)<	FR(40)	Organic Phosphate	N/A

### Mercury Information

Number of bulbs	Average per bulb
0	NA

## DECLARATION OF CONFORMITY WITH GAZETTE OF INDIA: EXTRAORDINARY, E-WASTE (MANAGEMENT & HANDLING) RULES (INDIA ROHS)

Dell Inc. declares that all Dell branded products have been designed and manufactured in compliance with E-Waste (Management & Handling) Rules<sup>2</sup> on the reduction in the use of hazardous materials in the manufacture of electrical and electronic equipment and their maximum allowed concentrations by weight in the homogenous material (except for the exemptions listed in schedule II).

Substance	Concentration
Lead	0.1%
Mercury	0.1%
PBB (Polybrominated Biphenyls)	0.1%
PBDE (Polybrominated Diphenyl Ethers)	0.1%
Hexavalent Chromium	0.1%
Cadmium	0.01%

Compliance has been verified via internal design controls, supplier declarations, and/or analytical test data. The undersigned below possesses the complete technical documentation relating to the declaration of compliance.

For additional information please visit:

- Restricted Material Compliance [www.dell.com/environmental\\_information](http://www.dell.com/environmental_information)

<sup>1</sup> **Waste Handling.** Local regulations should be observed when disposing of this product due to the presence of the materials and substances as listed above.

<sup>2</sup> E-Waste (Management & Handling) Rules 2011, by the Ministry of Environment & Forests, Government of India dated May 12, 2011.



- Products MSDS (Material Safety Data Sheets):

Batteries:

[http://www.dell.com/content/topics/topic.aspx/global/shared/about\\_dell/values/regulatory\\_compliance/en/dell\\_battery\\_declaration\\_january2011?c=us&l=en&s=corp&~ck=anavml](http://www.dell.com/content/topics/topic.aspx/global/shared/about_dell/values/regulatory_compliance/en/dell_battery_declaration_january2011?c=us&l=en&s=corp&~ck=anavml)

## IX. PACKAGING

Information on Dell's sustainable packaging effort available [here](#).

Additional materials restricted in Packaging as per Dell's Restricted Material Guidance document found [here](#).

Packaging Materials	Total Weight of each Material type, (kg)	% of Post-Consumer Recycled Content (PCR)		
		APJ region	DAO region	EMEA region
Corrugated Fiberboard	0.541	99.5%	99.5%	99.5%
EPE	0.008	0.0%	0.0%	0.0%
Molded paper pulp	0.297	100.0%	100.0%	100.0%
HDPE (including thermoformed)	0.009	0.0%	0.0%	0.0%

## X. BATTERIES

Below is a listing of batteries that could be present in the product:

Battery Description – Batteries	Battery Type	Battery Weight (kg)
CR-2032 with cable wire	Lithium	0.004 (max)
4 cell battery	Lithium	0.24
6 cell battery	Lithium	0.35
9 cell battery	Lithium	0.51

## XI. DESIGN FOR ENVIRONMENT

Dell systems are, when applicable, designed for easy assembly, disassembly, and servicing.

For more information on product Recyclability please visit [www.dell.com/environmental\\_information](http://www.dell.com/environmental_information)

## XII. RECYCLING/ END-OF-LIFE SERVICE INFORMATION

Take back and recycling services are offered for this product in certain countries. If you want to dispose of system components, contact Dell for instructions by emailing [recycling\\_emea@dell.com](mailto:recycling_emea@dell.com) or visit [www.dell.com/recyclingworldwide](http://www.dell.com/recyclingworldwide) and select the relevant country.

## XIII. HELPFUL LINKS

- **Environmental Policy**  
<http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-global-environmental-policy.pdf>
- **Environment Website**  
[www.dell.com/earth](http://www.dell.com/earth)
- **Corporate Sustainability Report**  
<http://www.dell.com/Learn/us/en/uscorp1/report?c=us&l=en&s=corp&delphi:gr=true>
- **ISO 14001 Certification**  
<http://i.dell.com/sites/content/corporate/corp-comm/en/Documents/dell-iso14001-worldwide.pdf>
- **Materials Restricted for Use**  
[http://www.dell.com/downloads/global/corporate/environment/restricted\\_materials\\_guid.pdf](http://www.dell.com/downloads/global/corporate/environment/restricted_materials_guid.pdf)
- **Chemical Use Policy**  
<http://i.dell.com/sites/doccontent/corporate/environment/en/Documents/chemical-use-policy.pdf>
- **Client Energy Calculator**  
<http://www.dell.com/content/topics/topic.aspx/global/products/landing/en/client-energy-calculator?c=us&l=en>
- **Product Carbon Footprint**



[http://content.dell.com/us/en/corp/d/corp-comm/environment\\_carbon\\_footprint\\_products](http://content.dell.com/us/en/corp/d/corp-comm/environment_carbon_footprint_products)

- **RoHS Compliance**  
[www.dell.com/rohsinfo](http://www.dell.com/rohsinfo)
- **REACH Compliance**  
[www.dell.com/REACH](http://www.dell.com/REACH)
- **Recycling Information**  
[www.dell.com/recycling](http://www.dell.com/recycling)
- **Supplier Responsibility**  
<http://content.dell.com/us/en/corp/d/corp-comm/standards-for-suppliers.aspx>

#### XIV. APPENDIX A: ErP Lot 3 Product (Energy Consumption) Information

The ErP Lot 3 Standard includes requirements for certain product specific information to be provided by the manufacturer. This is applicable to Desktops, Integrated Desktops, Notebooks, Tablets, Slates, Notebook Thin Clients, Desktop Thin Clients, Workstations, Mobile Workstations, Computer Servers, and Small Scale Servers.

ErP Lot 3 - Dell Inc. Notebook Tier II Test & Report Template - ENV0379

Category A	Those not meeting category B, or C as defined below		
Category B	Defined as notebooks with a discrete GPU		
Category C	(a) a minimum two physical cores in the CPU; and (b) a minimum two gigabytes (GB) of system memory; and (c) a discrete graphics card (dGfx) meeting the G3 (with FB Data Width > 128-bit), G4, G5, G6 or G7 classification		
TEC Formulas	Category	TECBASE (kWh)	Modal Limits
Mode Weightings	Notebooks		Watts
Toff	60%	A	Sleep WOL on 3.7
Tsleep	10%	B	Sleep WOL Off 3
Tidle	30%	C	Off WOL On 1.7
			Off WOL OFF 1
			Lowest Power State 0.5
Marketing Model/Name	P29F / Latitude E6540		
Line of Business	Latitude		
Operating System & Version	x47		
Is NB shipped with WoL enabled in "Sleep" Mode?	No		
Is NB shipped with WoL enabled in "Off" Mode?	No		

#### Category Selection

Highest anticipated power-demanding configuration available within that product category point 7.1.1 (as defined in Article 2)			
Data collection is required for each applicable Category per platform (Category A, B, and C) to be sold into the European Union (EU).			
Fill in the appropriate configuration information into each column as applicable.			
Processor Speed in GHz	2.9	2.8	
Number of Cores	2	4	
Total Installed Memory in GB	2	2	
Graphics	Integrated	G3(with FB Data Width <= 128-bit)	
Category	Category A	Category B	

#### Configuration Adders

Total Installed Memory in GB	2	2	0
Memory Adder	0	0	0
'Additional Internal Storage' means any and all internal storage devices, including hard disk drives (HDD), solid state drives (SSD) and hybrid hard drives (HHD), included within a computer beyond the first;			
Additional Internal Storage?	No	No	Select
Storage Adder	0.00	0.00	

1st Discrete Graphics Card?	Integrated	G3(with FB Data Width <= 128-bit)	0.00
1st Discrete Graphics Adder	0.00	13.00	FALSE
2nd Discrete Graphics Card?	N/A	N/A	Select
2nd Discrete Graphics Adder	0.00	0.00	

'Television tuner' means a discrete internal component that allows a computer to receive television signals;

Discrete Television Turner Card?	No	No	Select
Discrete TV Turner Card Adder	0.00	0.00	

#### Test Data & Results

As Tested: Lowest Power State	0.43	0.43	
As Tested: Poff(W) WOL Disabled	0.43	0.43	
As Tested: Poff(W) WOL Enabled	0.43	0.46	
As Tested: Psleep(W) WOL Disabled	0.99	1.01	
As Tested: Psleep(W) WOL Enabled	1.24	1.25	
As Tested: Pidle(W)	9.14	9.41	
Base TEC Limit (kWh)	27	36	0
TEC Adders Limit (kWh)	0.00	13.00	#VALUE!
Base + Adders TEC Limit (kWh)	27.00	49.00	#VALUE!
Results TEC	27.14	27.86	0.00



Power Supply Model #	Internal or External	Link to efficiency report
<b>AA65NM121</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477379&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477379&amp;appliance=EPS&amp;nr=1</a>
<b>DA65NM111-00</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478051&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478051&amp;appliance=EPS&amp;nr=1</a>
<b>HA65NS5-00</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5470487&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5470487&amp;appliance=EPS&amp;nr=1</a>
<b>LA65NS2</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485275&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485275&amp;appliance=EPS&amp;nr=1</a>
<b>DA65NM130</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8954085&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8954085&amp;appliance=EPS&amp;nr=1</a>
<b>HA65NM130</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6448362&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6448362&amp;appliance=EPS&amp;nr=1</a>
<b>HK65NM130</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8095191&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8095191&amp;appliance=EPS&amp;nr=1</a>
<b>LA65NM130</b>	<b>65w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6474043&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6474043&amp;appliance=EPS&amp;nr=1</a>
<b>AA90PM111</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477380&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477380&amp;appliance=EPS&amp;nr=1</a>
<b>DA90PM111</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478054&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478054&amp;appliance=EPS&amp;nr=1</a>
<b>FA90PM111</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477406&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5477406&amp;appliance=EPS&amp;nr=1</a>
<b>LA90PM111</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485277&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485277&amp;appliance=EPS&amp;nr=1</a>
<b>BT90PM130</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8954099&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8954099&amp;appliance=EPS&amp;nr=1</a>
<b>DA90PM130</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6448377&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=6448377&amp;appliance=EPS&amp;nr=1</a>
<b>LA90PM130</b>	<b>90w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8783126&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=8783126&amp;appliance=EPS&amp;nr=1</a>
<b>DA130PE1-00</b>	<b>130w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478056&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5478056&amp;appliance=EPS&amp;nr=1</a>
<b>LA130PM121</b>	<b>130w, External</b>	<a href="http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485278&amp;appliance=EPS&amp;nr=1">http://oee.nrcan.gc.ca/pml-lmp/index.cfm?action=app.formHandler&amp;operation=details-details&amp;ref=5485278&amp;appliance=EPS&amp;nr=1</a>

\* **Energy Consumption** results are based solely upon the laboratory testing of the **System Configuration** listed above. Energy consumption is tested at 230 Volts / 50 Hz.

#### Energy Consumption\*

Energy efficiency benefits the environment and lowers the total cost of equipment ownership by reducing power consumption. Dell offers energy calculators that help estimate power needs, potential emissions avoidance and potential cost savings. Click [here](#) for Dell's Client Energy Savings Calculator, Data Center Capacity Planner, and Monitor Power Savings Calculator. Information on Energy Efficiency is available [here](#)

\* This document is informational only and reflects laboratory performance. Your product may perform differently, depending on the software, components and peripherals you ordered. Accordingly, the customer should not rely upon this information in making decisions about electrical tolerances or otherwise. No warranty as to accuracy or completeness is expressed or implied.

For more details visit [www.dell.com/environmental\\_information](http://www.dell.com/environmental_information)

#### Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

#### Computers Category A:



Service Level	Sound Power ( $L_{WAd}$ , bels) (1 bel=10 decibels, re $10^{-12}$ Watts)	Sound Pressure Bystander Position ( $L_{pAm}$ , decibels) (re $2 \times 10^{-5}$ Pa)
Hard Drive Accessing	2.8	17.0
Optical Drive Accessing	4.7	34.2
Idle	2.8	17.3

## Computers Category B:

Service Level	Sound Power ( $L_{WAd}$ , bels) (1 bel=10 decibels, re $10^{-12}$ Watts)	Sound Pressure Bystander Position ( $L_{pAm}$ , decibels) (re $2 \times 10^{-5}$ Pa)
Hard Drive Accessing	3.4	20.2
Optical Drive Accessing	4.7	32.1
Idle	3.2	18.0