Master thesis opponent’s review

Master thesis: Survey about Current State of Art of Electromobiles and Future Development Trends

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Thesis opponent: Doc. Dr. Ing. Jan Kyncl

Rating (1 – 5) (1 = best; 5 = worst):

1. Fulfillment of assignment requirements: E
2. Systematic solutions of individual tasks: D
3. Ability to apply knowledge and to use literature: D
4. Thesis formal and language level: C
5. Thesis readability and structuring: C
6. Thesis professional level: E
7. Conclusions and their formulation: E


Brief summary evaluation of the thesis (compulsory):

The author carried out a research of currently produced electric vehicles, battery types and several types of drives.
There are many mistakes in the work, the pictures are of very different quality according to their origin.
The calculation on page 19 applies only under idealized assumptions and does not apply to the current waveform according to Figure 2.15.
The “Top Speed (kmph): 149.669” type of data is bizarre (page 6).
In Faraday's Law on page 14, there should be no partial but ordinary derivative.
The air density in Table 5.1 at this pressure corresponds to a temperature of about 500°C, not 19°C.
Derivation on pages 46 to 48 is essentially completely erroneous.
I do not consider the results of the electric car simulation realistic.

Questions:
1. Provide the correct derivation formulas from pages 46 to 48.