

- Thesis (Bachelor) –

Evaluation of Markers within LED

Degradation Time Series

Modeling, Statistics, Programming



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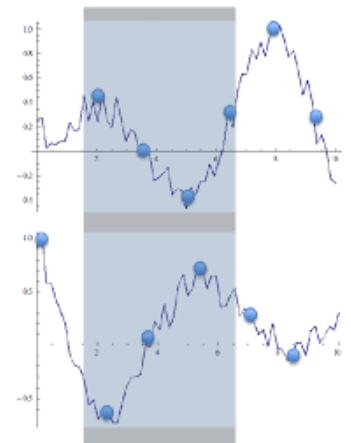
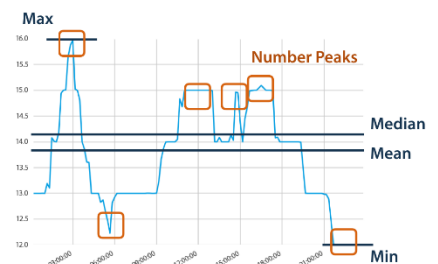
FACHGEBIET
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LED light sources are nowadays widely used in various applications. Over the lifetime of the LED, both the intensity and the shape of the spectrum change due to degradation processes affecting the LED. Therefore, it is important to uncover underlying degradation processes in order to determine the expected lifetime of the LED.

The purpose of this work is to investigate which markers are suitable for further classifying LED lifetime data. The work is divided into the following work packages:

- Literature research
- Determine a set of possible markers, e.g. min, max, mean, peak, slope ...
- Evaluate markers on
 - original series
 - n-th derivative of series
 - transformed series log, sqrt, ...
 - Subsets of the above
- Evaluate results in terms of suitability for further use

The specific task and the scope of the work can be adapted to the students' wishes or professional preferences.



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