

- Thesis (Bachelor / Master) -

Feature Extraction in LED Degradation Time Series by Dimensional Reduction of the LED Spectrum

Modeling, Statistics, Programming

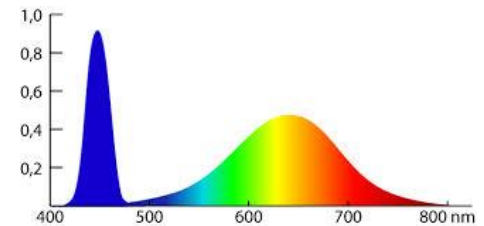


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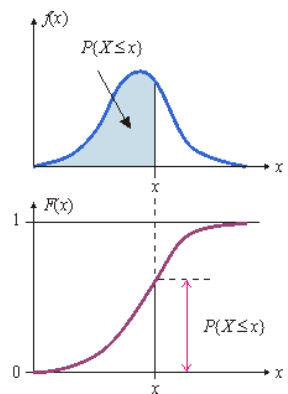
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LED light sources are nowadays widely used in various applications. Over the lifetime of the LED, both the intensity and the shape of the spectrum change due to degradation processes affecting the LED. Therefore, it is important to uncover underlying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

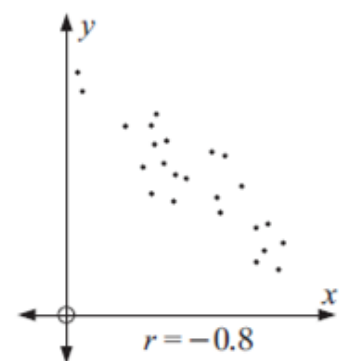


The purpose of this work is to investigate whether a reduction of the 2D spectral space into a 1D space is suitable for feature extraction. The work is divided into the following work packages:

- Literature research
- Investigate spectral bin size and shape
- Investigate Correlation between shape parameters, time and photometric parameters
- 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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