

## I. IDENTIFICATION DATA

<b>Thesis name:</b>	Application of laser for general lighting
<b>Author's name:</b>	Yufei Zhang
<b>Type of thesis :</b>	master
<b>Faculty/Institute:</b>	Faculty of Electrical Engineering (FEE)
<b>Department:</b>	Dept. of Electrical Power Engineering
<b>Thesis reviewer:</b>	Ing. Petr Holec
<b>Reviewer's department:</b>	AXEN, s.r.o.

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>ordinarily challenging</b>
<i>Evaluation of thesis difficulty of assignment.</i>	
This assignment may be quite interesting, because it is still evolving and needs to be examined.	

<b>Satisfaction of assignment</b>	<b>fulfilled</b>
<i>Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.</i>	
The basis of master thesis name consist of laser application for general lighting. However, the content of this work does fulfill these themes only partly.	

<b>Method of conception</b>	<b>partially applicable</b>
<i>Assess that student has chosen correct approach or solution methods.</i>	
The method of conception is chosen well but the solution is poorly done, without consultation with commercial experts.	

<b>Technical level</b>	<b>D - satisfactory.</b>
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
There are significant shortages in technical complexity of the work. There are lot of external literature sources, which are overused in whole thesis.	

<b>Formal and language level, scope of thesis</b>	<b>D - satisfactory.</b>
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
Many pictures are poorly taken from external sources. There are many typographical mistakes, like incorrect usage of numbers and units (e.g. in chapter 3.3.1, p.12 above fig. 8).	

<b>Selection of sources, citation correctness</b>	<b>E - sufficient.</b>
<i>Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.</i>	
There are many citations from external sources in the work. However lot of these citations are used for own thesis conclusions.	

<b>Additional commentary and evaluation</b>	
<i>Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.</i>	
Primary goals of the thesis are met. However, many thesis conclusions are made from cited external sources.	

### III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

*Summarize thesis aspects that swayed your final evaluation. Please present apt questions which student should answer during defense.*

I evaluate handed thesis with classification grade E - sufficient.

#### Questions:

- 1) What is the main reason, why the white light generated from laser is not widely used for general lighting yet?
- 2) What is the main principle of laser radiation transmission and distribution through the phosphor (fig. 20)?
- 3) How could Li-Fi signal be recognized in wide mixture of light from many other interfering light sources in the room?

Date: 04/06/2019

Signature: