

SUPERVISOR'S OPINION OF FINAL THESIS

I. IDENTIFICATION DATA

Thesis name: The applications of biodynamic luminaires for road lighting

Author's name: Bharath Chandran

Type of thesis: master

Faculty/Institute: Faculty of Electrical Engineering (FEE) **Department:** Dept. of Electrical Power Engineering

Thesis supervisor: Ing. Marek Bálský, Ph.D.

Supervisor's department: Dept. of Electrical Power Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment ordinarily challenging

Evaluation of thesis difficulty of assignment.

Diploma thesis deals with the application of the biodynamic LED luminaires for road lighting including light pollution analysis. The topic of the thesis is actual and therefore interesting and challenging.

Satisfaction of assignment fulfilled

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.

Student fulfilled all points of the assignment.

Activity and independence when creating final thesis

A - excellent.

Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.

Student had positive approach, worked independently and consulted regularly.

Technical level B - very good.

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

The thesis summarizes the photometric parameters of LED luminaires important for road lighting and the requirements on the operating schedule of biodynamic road lighting system based on technical standards oncoming in neighboring states.

Formal and language level, scope of thesis

A - excellent.

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

The thesis is logically structured into chapters. Formal level of thesis is good.

Selection of sources, citation correctness

B - very good.

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.

Student used relevant and useful study materials. References are correctly cited. The list of references has an unusual format, but it does not affect its comprehensibility.

Additional commentary and evaluation

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.

The goals of the thesis were met. The illuminance calculation of modernized road lighting system including light trespass analysis demonstrated the ability of the author for practical implementation of the proposed theoretical procedures.



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III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. See page 1.

I evaluate handed thesis with classification grade A - excellent.

Date: **10.6.2020** Signature: