

I. IDENTIFICATION DATA

Thesis title:	Shaping of laser beam
Author's name:	Kaung Htet Zaw
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Department of Instrumentation and Control Engineering
Thesis reviewer:	Ing. Jiří Čáp, Ph.D.
Reviewer's department:	CTU in Pragut, Faculty of Mechanical Engineering, The Department of Instrumentation and Control Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
The assignment is not fundamentally demanding in the theoretical part, but also contains the experimental part, so it is suitable for the bachelor's thesis.	

Fulfilment of assignment	fulfilled
The student presents the source research part, the design of the optical system, prepare mechanical parts for optical bench and realize experiment.	

Methodology	correct
The student proceeded logically, verified the calculated parameters in the experiment and present the measured results.	

Technical level	C - good.
The thesis contains a reasonable theoretical introduction to the basics of lasers, laser beams shape and optical systems based on thin lenses for beam shaping. When designing the optical system, the student applied the knowledge presented in the theoretical introduction, where he describes the optical calculations of systems with two or more lenses.	

Formal and language level, scope of thesis	C - good.
The language level is good, the work is clear.	

Selection of sources, citation correctness	B - very good.
The work is properly provided with a list of used and cited literature to which it is referred in the text.	

Additional commentary and evaluation (optional)



THESIS REVIEWER'S REPORT

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

The work fulfilled the task of designing an optical system for shaping a laser beam. Theoretical results were verified in the laboratory from the available components and deviations from the calculated assumptions were explained. The work also includes a structural part, where the student designed mechanical sleeves for fixing optical elements. The performing a successful verification experiment is beneficial for practice.

Notes:

1. The image 14. is not quite correct. The two lenses should be parallel, and the beam is divergent in vertical direction.
2. There are some pictures and photos of the experiment on the end of thesis, but there are no photo of the result, the laser beam spot.

The grade that I award for the thesis is **C - good**.

Date: **25.6.2023**

Signature: