

Wroclaw University of Science and Technology

GENERAL PHYSICS LABORATORY REPORT

Theme of class: OHM'S LAW FOR ALTERNATING
CURRENT

Students:

1. Ivan Melnyk 275510
2. Egemen Goncu 276829

Date of class: 2023-03-14

Submission Date: 2023-03-21

Lab assistant: dr inz. Janusz Bozym

Contents

1	Introduction	2
1.1	Theory	2
1.2	Equipment	2
1.3	Goals	2
2	Experiment	3
2.1	Measurements of the spectral characteristics of the photocell photocurrent . .	3
2.2	Measurements of current-voltage characteristics	3
2.3	Uncertainties	3
3	Conclusion	4

1 Introduction

1.1 Theory

1.2 Equipment

The equipment used in this experiment included:

- Monochromator
- DC ammeter Sanwa CD771
- DC voltmeter Sanwa CD771
- Illuminator
- DC power supply for the illuminator
- Photocell power supply

1.3 Goals

2 Experiment

2.1 Measurements of the spectral characteristics of the photocell photocurrent

2.2 Measurements of current-voltage characteristics

2.3 Uncertainties

Amperemeter uncertainty $-(400\mu\text{A} \quad 400\text{mA}) = \pm(1,4 \text{ \% rdg} + 3\text{dgt})$

$$u(i) = \frac{\Delta_p i}{\sqrt{3}} \quad (1)$$

$$\Delta_p i = \frac{a}{100 \% } i + n \cdot \Delta_{res} = \quad (2)$$

λ_o

3 Conclusion

In conclusion,...