

Malus' law 2.5.04-00

What you can learn about ...

- Electric theory of light
- Polarization
- Polarizer
- Analyzer
- Brewster's law
- Malus' law

Principle:

Linear polarized light passes through a polarization filter.

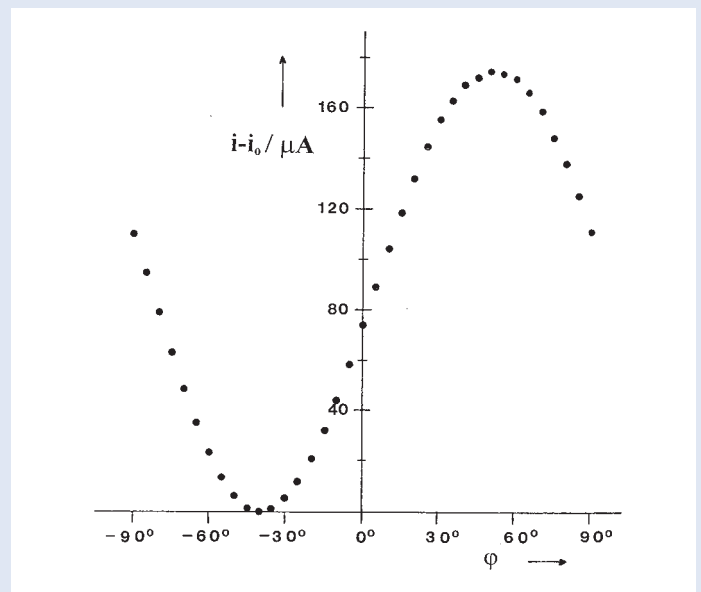
Transmitted light intensity is determined as a function of the angular position of the polarization filter.



What you need:

Laser, He-Ne 1.0 mW, 230 VAC	08181.93	1
Optical profile bench, $l = 600$ mm	08283.00	1
Base for optical profile bench, adjustable	08284.00	2
Slide mount for optical profil bench, $h = 30$ mm	08286.01	3
Polarisation filter on stem	08610.00	1
Photoelement for optical base plate	08734.00	1
Digital multimeter 2010	07128.00	1

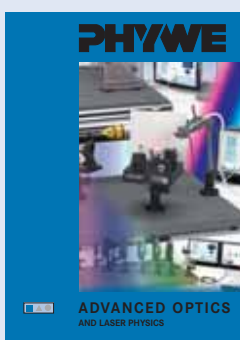
Complete Equipment Set, Manual on CD-ROM included  
 Malu's law P2250400



Corrected photo cell current as a function of the angular position  $\varphi$  of the polarization plane of the analyzer.

Tasks:

1. The plane of polarization of a linear polarized laser beam is to be determined.
2. The intensity of the light transmitted by the polarization filter is to be determined as a function of the angular position of the filter.
3. Malus' law must be verified.



You can find more advanced optics in this brochure  
 Order No. 00117.02  
 (see page 121)