

The smallest standard Polaroid discs (shown here approximately actual size) have a diameter over three times that of the largest Nicol prism regularly listed—cost less than one-seventh as much.

POLAROID The New Light Polarizer Unlimited in Area - Low in Cost

Polaroid is a new medium for polarizing light.

It offers an entirely new order of convenience and economy in the present uses of polarized light—opens up for exploration new fields which have remained untouched because of the inconvenience and expense of previous polarizers. Polaroid makes it possible to use polarized light almost as easily and cheaply as ordinary light.

It polarizes by simple transmission. It is available in unlimited sizes. It is low in cost.

Applications

Classroom demonstration and study of polarized light, including lantern-slide projections of polarization experiments. Improvised conversion of regular microscopes and other optical instruments for use as polarizing instruments. Detection and analysis of strains in transparent materials such as glassware, models of machine or structural parts. Intensifying or eliminating of specular reflections of polarized light. Measurement of gloss in fabrics and paper. Photometry. Color-matching. Saccharimetry and other polarimetric applications. Study and demonstration of circular and elliptical polarization.

Study of optical properties of metals. Accessory for Kerr cells. Study of Zeeman and Raman effects. Analysis of crystals. Ultra-microscopy. Variable-color illumination with sheets of mica between Polaroids. Experiments involving binocular vision and independent images. Smooth control of light-intensity. Non-glare surface studies. Demonstration of natural polarization of skylight and reflections. Gem testing. Etc.

Properties

Polaroid consists of a cellulosic film mounted between glass plates. The film is a matrix for sub-microscopic dichroic crystals (about 10¹² per square inch) accurately oriented in such a way that the entire film acts as a single crystal. Polarization of visible light is uniform over entire area and is more than 99½% perfect. Complete polarization except at extreme ends of visible spectrum where the sensitivity of the eye is low. Structure invisible at 1100 magnifications. Unaffected by age, ultra-violet light, temperatures to 250° F.

Sizes and Prices

Set of two 4 cm. discs in moulded rims—\$10.00—25 cm. disc in metal rim—\$125.00. Other sizes available on special order for prompt delivery. Terms: net 10 days.

U. S. Patents-1,918,848-1,989,371-1,951,664-1,956,867-2,011,553

British Patents-412,179-419,925-433,455

Order directly from The Polaroid Corporation

Printed in U.S. A.