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A Calibration Device for Moiré-Fringe-Topographic System

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Fig. 1. A customized wedge (reference object)

A wedge of size 18.1 *cm* × 21.1 *cm* was designed. This wedge consisted of three plane surfaces (Fig. 1). The first plane is used for base, the second for reference and the third for observations of moiré fringes. The first and the second planes were aligned at right angle so that the whole wedge could be placed on a horizontal surface. The second and the third planes were connected through hinges and a metallic stopper, due to which the third plane could be set at any desired angle between 0 and 90^o. However, the angles ranging from 2^o to 45^o produced the best results. A protector was fixed at one side of the wedge to measure angle of the third plane with respect to the second plane.

Keywords: 3-D-optical imaging • Height map of test object (subject) • Non-contact measurements • Non-invasive testing • Stereophotogrammetry

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