

Accepted Manuscript

Title: A novel evaluation and compensation method for ultra-precision machining of hybrid lens

Author: L.H. Li C.Y. Chan W.B. Lee Y.H. Liu

PII: S0141-6359(15)00094-X

DOI: <http://dx.doi.org/doi:10.1016/j.precisioneng.2015.05.001>

Reference: PRE 6237

To appear in: *Precision Engineering*

Received date: 19-12-2014

Revised date: 28-4-2015

Accepted date: 4-5-2015



Please cite this article as: Li LH, Chan CY, Lee WB, Liu YH, A novel evaluation and compensation method for ultra-precision machining of hybrid lens, *Precision Engineering* (2015), <http://dx.doi.org/10.1016/j.precisioneng.2015.05.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Research highlights

We designed and fabricated a diffractive-refractive hybrid objective lens (DHOL) compatible with multi-type optical discs (Blu-ray Disc (BD), China Blue High-Definition Disc (CBHD), DVD and CD).

We proposed a novel refractive compensation method.

Through superimposing a small refractive curvature, a significant improvement in the diffractive performance can be achieved.

The optimal design was fabricated and found to perform satisfactorily.

Accepted Manuscript

Download English Version:

<https://daneshyari.com/en/article/7180656>

Download Persian Version:

<https://daneshyari.com/article/7180656>

[Daneshyari.com](https://daneshyari.com)