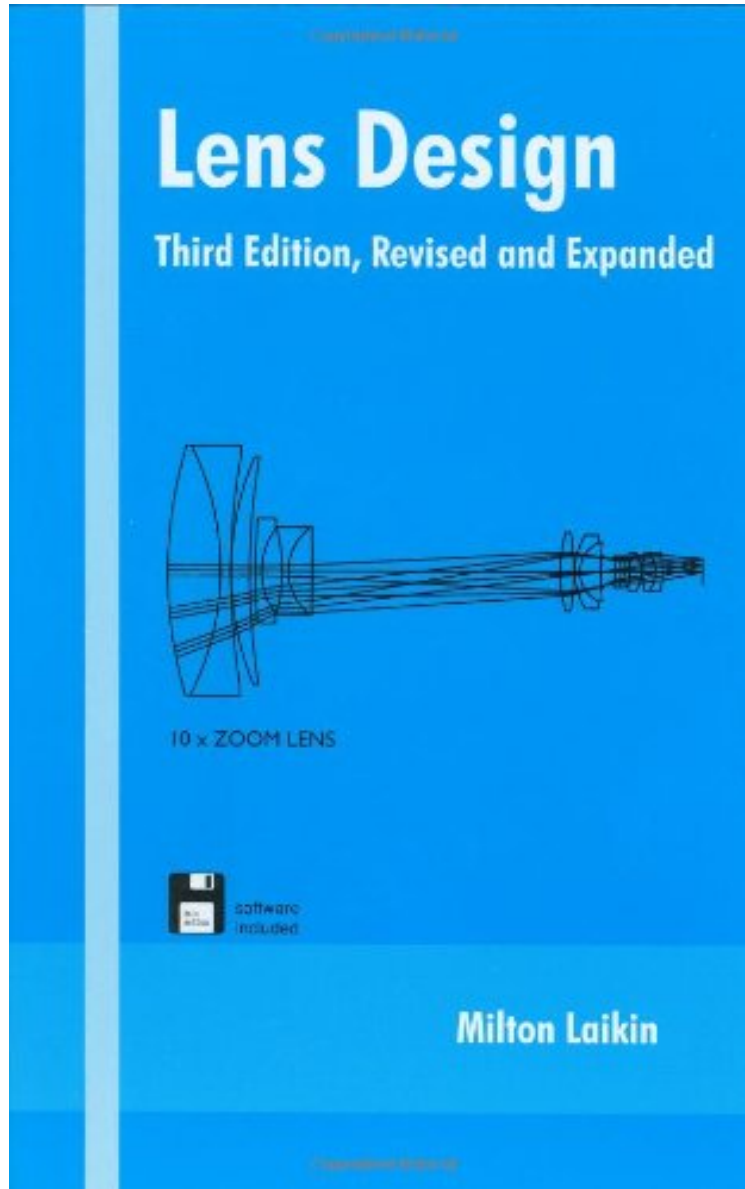


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## Lens Design, Third Edition, (Optical Science and Engineering)

*Milton Laikin*

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**Milton Laikin : Lens Design, Third Edition, (Optical Science and Engineering)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Lens Design, Third Edition, (Optical Science and Engineering):

6 of 7 people found the following review helpful. For practicing lens designers onlyBy Arthur J. VandereedtI work in

the electro-optics field, with a background in EE and laser resonators. Since I came from an electrical engineering background, I have sought to get more knowledge in the practical field of lens design beyond laser resonators and optical accessories. For that reason, I bought this book, as well as the Virendra N. Mahajan series on Optics and Aberrations. Unlike that series, as well as the Siegman classic on Lasers, this book introduces many equations, terms, and plots, as well as glass catalog items, with very little in the way of introduction, derivation or even an explanation of terms. It is solely meant for an experienced practicing lens designer only. I was very disappointed in this book and its review. I found it was reviewed wrongly, for the level at which it should be purchased and read, quite disceptive as a result, even though I was sure it was not unintentional. 0 of 10 people found the following review helpful. Strong Enough For A Physicist, But Made For An Engineer! By A Customer

Lens design by Laikin could be described as a good but incomplete beginner book. Lens design is a quite strong and wide subject but reading this book as first action if you need to design your own imaging lens could save a lot of your time and made you successful. The biggest quality of that script is the total absence of stupid reminders: what is a wave, do you remember matrix optics, what is a ray, etc. If the lens design is an unexplored world the first chapter will keep you awake. You will receive within 45 pages an emergency course around how we do that today! Unfortunately the reverse is a lack of basic principles. Discussion about the aberration shape correction, iteration technique, some of the most common apparatus are even forgiven, like the spectrometer. But even if such apparatus is not treated I feel safe you will find somewhere else easily, maybe too much often, the same thing taken from Born and Wolf (Principles of Optics). The SECRET of this book is that it is not at all a physics book, nobody will give you some explanation about the calculus of MTF or some related experiment (the basic laboratory tool to compute experimentally such function are even not described). You will get a well structured showing you the structure and the arrangement you should have to do that task in our computer world. The 20 examples (7/8 of the whole book) is what you need because lens design is done necessarily by iterative process, with the help of any numerical method to find out some good compromise! The author will give you a good starting point if you wish to modify an current design. I can promise you this book will be your favorite. However it is noway some table and example salad. You get for each example two or three lens prescriptions (radius, material, diameter), the lens drawing, some explanation and the corresponding MTF function. NOTHING ELSE. At least the first chapter finish you will be happy to have it under the hand when the time to explore a new design will come.

Featuring over 700 references, equations, tables, and drawings, this highly lauded and best-selling reference emphasizes practical designs of over 30 lens systems, including single-element, two-element achromats, air-spaced triplets, projection lenses, and sophisticated wide-angle and zoom lenses. It comes with software that supplies starting solutions for computer optimization programs lens prescriptions and several shorter programs to compute the refractive index of glasses from a variety of manufacturers, create lens drawings, perform zoom computations, do test glass fitting, and calculate third-order solutions for single lenses, achromats, and triplets.