

REVIEW

LIGHT CALCULATIONS AND MEASUREMENTS—By H. A. E. Keitz. Pp. I-XVI+413.
Philips Technical Library, Eindhoven, Holland, 1955. Price not given.

As mentioned in the preface, the book is written avoiding as far as possible higher mathematics, so that beginners having little knowledge in higher mathematics can follow the subject easily. The book is divided into two parts, Part I dealing with light calculations and Part II with measurement of light. Of the twelve chapters in Part I the first two chapters deal with some properties of light and measurement of solid angle, and the next chapter with the units and calculations of luminous flux, luminous intensity and quantity of light. The fourth and fifth chapters deal with methods of diagrammatic representation of light distribution around a source of light. The units of illumination, luminance and luminous emittance and methods of calculating these quantities have been explained in detail in the next three chapters. The properties of extended sources of various shapes have been discussed in Chapter IX, and the next chapter deals with the influence of reflection, absorption and transmission of light in illuminating engineering. A fairly long chapter is then devoted to geometrical optics and luminance of images formed by optical systems. The last chapter of Part I deals with photometric measuring units and their dependence on the sensitivity of the eye to different wavelengths in the visible region.

In the second part various types of apparatus used for measurement of the quantities which have been defined in Part I have been described in detail and methods of measurement have been explained. Appendices containing several useful tables and also diagrams showing light distribution and zonal luminous flux in a few typical light fittings have also been included.

Although the book is intended for beginners, frequent references to original papers have been included in it to help illuminating engineers engaged in research work in this line. The volume can be used as a text book in this subject and wide circulation of this book among professional illuminating engineers in India and other countries in which new types of artificial light have been introduced only in recent years will no doubt result in the economic use of such sources of light.

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