

nonlinear photometries.

2.14 Bibliographic Notes for Chapter 2

This chapter is based in the main on unpublished lecture notes (Refs. [210], [211]) in radiometry and photometry given in 1953 and 1954 at the Visibility Laboratory of the University of California, San Diego. The characterization of the foundations of radiometry in terms of a systematic use of additivity and continuity properties of the radiant flux function Φ , as given in Sec. 2.3, is derived from a similar treatment given in Ref. [251], and which in turn is based on the general measure-theoretic approach to radiometry and radiative transfer theory introduced in [216]. An important paper on photometry is that of Gershun, [98] who introduced and made precise the concept of the light field (our vector illuminance \mathbf{E}). Gershun also introduced the operational definition of radiance in the form $N = H/\Omega$ (re: (2) of Sec. 2.5). An important source of photometric wisdom may be found in the writings of Moon. In particular, the radiometric lectures cited above drew inspiration from some of the ideas of Refs. [184] and [185], especially in connection with developing general photometries. An old standard work on photometry and still valuable is Walsh's treatise [311]. The work by Le Grand, Ref. [153], is a relatively modern work on the optical-physiological properties of human vision which may be used to supplement the discussions of Sec. 2.12.