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Spectral qualitySpectral power distribution curve; Colour temperature; Colour rendering; Percentage content of primary hues; Measurement and control of colour temperature; The mired scale; LIGHT OUTPUT; Units; Illumination laws; Reflectors and luminaires; Constancy of output; Efficiency; DAYLIGHT; TUNGSTEN FILAMENT LAMPS; TUNGSTEN-HALOGEN LAMPS; FLUORESCENT LAMPS; METAL-HALIDE LAMPS; PULSED XENON LAMPS; EXPENDABLE FLASHBULBS; ELECTRONIC FLASH; Flash circuitry; Flash output and power; Flash duration and exposure; Portable units; Studio flash; Automatic flash exposure; Integral flash units
Red-eye avoidanceOTHER SOURCES; Light-emitting diodes; Diode lasers; BIBLIOGRAPHY; Chapter 4 The human visual system; INTRODUCTION; THE PHYSICAL STRUCTURE OF THE HUMAN EYE; Tunics; Cornea; Conjunctiva; Iris and pupil; Crystalline lens; Ciliary body; Vitreous cavity and vitreous humour; Retina and choroid; Optic nerve; Structure of the retina; Rods and cones; 'non-imaging' cell layers; Receptive fields; DARK ADAPTATION; ELEMENTARY COLOUR VISION; Young-helmholtz theory of colour vision; Opponent theory of colour vision; COLOUR ANOMALOUS VISION; MOVEMENT AND FOCUSING
Focusing and correction of eyelightMovement; THE VISUAL PATHWAY; Visual cortex; BINOCULAR VISION; PERFORMANCE OF THE EYE; Luminance discrimination; Contrast sensitivity function; Visual acuity; ANIMAL VISION; BIBLIOGRAPHY; Chapter 5 Introduction to colour science; INTRODUCTION; THE PHYSICS OF COLOUR; COLOUR TERMINOLOGY; THE COLOUR OF OBJECTS; Spectral absorptance, reflectance and transmittance; CIE STANDARD ILLUMINATING ANDVIEWING GEOMETRIES; CIE STANDARD ILLUMINANTS AND SOURCES; MODELS OF COLOUR VISION; THE BASICS OF COLORIMETRY; Colour matching functions and the CIE standard observers
Calculating tristimulus values from spectral data

Sommario/riassunto

The tenth edition of The Manual of Photography is an indispensable textbook for anyone who is serious about photography. It is ideal if you want to gain insight into the underlying scientific principles of photography and digital imaging, whether you are a professional photographer, lab technician, researcher or student in the field, or simply an enthusiastic amateur. This comprehensive guide takes you from capture to output in both digital and film media, with sections on lens use, darkroom techniques, digital cameras and scanners, image editing techniques and processes, workflow, digital