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Nota di contenuto	Cover; The Manual of Photography; Copyright; Contents; Preface; Editors' Acknowledgements; Author Biographies; Chapter 1 Introduction to the imaging process; INTRODUCTION; THE IMAGING PROCESS; IMAGE CONTROL; THE ORIGINS OF PHOTOGRAPHY; PHOTOGRAPHIC IMAGING TODAY; DIGITAL IMAGING; DIGITAL IMAGE REPRESENTATION; Spatial resolution; Bit depth; Colour representation; File size and file formats; IMAGING CHAINS; EVALUATING IMAGE QUALITY; BIBLIOGRAPHY; Chapter 2 Light theory; INTRODUCTION; A BRIEF HISTORY OF LIGHT THEORY; WAVE-PARTICLE DUALITY; THE NATURE OF LIGHT; RADIOMETRY AND PHOTOMETRY Radiometric definitionsPhotometric definitions; OPTICS; WAVE THEORY; Simple harmonic motion; Principle of superposition; Plane waves; Light intensity; Refraction and dispersion; Polarization; Interference; Diffraction; Diffraction of a circular aperture and a single slit; Rayleigh criterion; THE ELECTROMAGNETIC SPECTRUM; BLACK-BODY RADIATION; Wien's Displacement Law; Planck's Law; THE

PHOTOELECTRIC EFFECT; THE PHOTON; BOHR MODEL OF THE ATOM;
THE EMISSION OF ELECTROMAGNETIC RADIATION IN ATOMS;
BIBLIOGRAPHY; Chapter 3 Photographic light sources; INTRODUCTION;
CHARACTERISTICS OF LIGHTSOURCES
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
