Glossary 107

Brightness: attribute of the visual sensation associated with the amount of light emitted from a given area. It is subjective correlate of luminance.

Technically defined as luminosity (obsolete): attribute of a visual sensation according to which an area appears to emit more or less light.

Brightness contrast: subjective assessment of the difference in brightness between two or more surfaces seen simultaneously or successively.

Chromaticity: property of a colour stimulus defined by its chromaticity coordinates, or by its dominant or complementary wavelength and purity taken together.

Chromaticity coordinates: ratio of each of a set of three tristimulus values to their sum.

Notes: (1) as the sum of the three chromaticity coordinates equals 1, two of them are sufficient to define a chromaticity; (2) in the CIE standard colorimetric systems, the chromaticity coordinates are presented by the symbols x, y, z and x_{10} , y_{10} , z_{10} .

Colorimeter: instrument for measuring colorimetric quantities, such as the tristimulus values of a colour stimulus.

Colour contrast: subjective assessment of the difference in colour between two or more surfaces seen simultaneously or successively.

Colour rendering (of a light source): effect of a light source on the colour appearance of objects compared with their colour appearance under a reference light source. The definition is more formally expressed as the effect of an illuminant on the colour appearance of objects by conscious or subconscious comparison with their colour appearance under a reference illuminant.

Colour stimulus: visible radiation entering the eye and producing a sensation of colour, either chromatic or achromatic.

Colour temperature $(T_{\rm C})$: the temperature of a Planckian (black body) radiator whose radiation has the same chromaticity as that of a given stimulus. Unit: K.

Note: the reciprocal colour temperature is also used, unit K^{-1} .

Contrast: (1) In the perceptual sense, assessment of the difference in appearance of two or more parts of a field seen simultaneously or successively (hence: brightness contrast, lightness contrast, colour contrast, simultaneous contrast, successive contrast, etc.). (2) In the physical sense, quantity intended to correlate with the perceived brightness contrast, usually defined by one of a number of formulae that involve the luminances of the stimuli considered, for example: ΔUL near the luminance threshold, or L_1/L_2 for much higher luminances.

Correlated colour temperature ($T_{\rm CC}$): the temperature of the Planckian (black body) radiator whose perceived colour most closely resembles that of a given stimulus at the same brightness and under specified viewing conditions. Unit: K.

Notes: (1) the recommended method of calculating the corre-