

Metrology & Hallmark

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Ensuring the metrological traceability of color measurement

Authors Sylwia Górnik, Alicja Zydorowicz - Central Office of Measures (Główny Urząd Miar)

[color measurement](#) [colorimetric](#) [reflectance spectrophotometer standards](#)

Abstract

Basic information about the standardization of color measurement by introducing concepts of illuminant, colorimetric observer and measurement geometry were presented. Tristimulus values X, Y, Z and colorimetric parameters L^* , a^* , b^* were used to present the mathematical description of color. The paper describes the measurement traceability of color measurement established by Ionizing Radiation Laboratory and Color Standards which calibrates the spectral reflectance standards and the reflectance spectrophotometer standards.

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