EVALUATION OF PAINT SUITABILITY PROVIDED FOR PAINTING THE INSIDE OF ULBRICHT'S SPHERE

Przemysław TABAKA

ABSTRACT *In photometry, in order to measure luminous stream, photometric integrators are used. They are usually spherical in shape and their interior is covered with white paint. The paint must meet requirements of norms and standards. This paper deals with general requirements which must be met in case of covering the inside of photometric integrators. The requirements are related to the theory of luminous stream measurement in a photometric integrator. This paper additionally presents results of research in terms of one sample which was covered with white paint and its suitability for covering the inside of Ulbricht's sphere. Total reflection coefficient as well as luminous propagation of reflected light and spectral distribution curve have been measured. The degree of integrator's colorimetric distortion after recovery of its inside has been checked.*

Keywords: *luminous flux, reflectance, chromaticity coordinates, colour temperature*