COMPARATIVE STUDY OF COLORIMETRIC MATERIAL CHARACTERIZATION BETWEEN *IEN GF* AND *INMETRO* NATIONAL STANDARDIZING LABORATORIES

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Abstract

This work presents a qualitative comparison of colorimetric secondary standards between two National Standardizing Laboratories, Istituto Elettrotecnico Nazionale Galileo Ferraris of Italy (IEN GF) and Brazilian Institute of Metrology (Inmetro).

For first step, the characterization of the samples was done at the IEN using a special goniophotometer, which doesn't need a calibration detector and use absolute measurement technique. On the second step, measurements were realized, using a simple experimental set-up for reflectance measurements mounted at the Radiometry Laboratory of Inmetro. On both characterizations, four colors samples were analyzed, using 0/45 and 45/0 geometries and monochromatic radiation from a tungsten-filament lamp simulating a illuminant A. Finally, the interlaboratory variation results will be presented. The purpose of this comparison was mainly to check the performance of the set-up system used in the Radiometry Laboratory.