

WORKSHOP - INEO

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POSTER PRESENTATION **ABSTRACTS**

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71. **Luminance Reference for the Measurement of OLEDs / PLEDs**
Referência de Luminância para a Medição de OLEDs / PLEDs

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Electroluminescent devices can be characterized in terms of light output and the reading register performed based on the concept of luminance, the light intensity per unit area (usually sampled in the direction of normal to the surface) is to be used in the calculation of efficiency and a figure of merit. The photometer may have offset that needs to be documented. To seek knowledge about possible drift in relation to the instrument class of accuracy set by the manufacturer an experiment was designed and conducted in Nov./01/2011, at Tucumán, Argentina. The experiment was called by the partners from Argentine: an operation of verification since it does not involve absolute method or luminance standard [1]. The performance check was conducted between two luminance meter, Argentina: LMT brand, model L1009; and Minolta brand, model LS110 (Brazil), luminance produced from an incandescent light bulb radiating a reference white were sampled. The range of luminance considered in terms of reading in the LMT, whose field of view was set according to the LS 110 (one third of degree) during the sampling process was (3.05 to 417) cd/m². The relative difference found indicates the need to multiply the reading of the instrument LS 110 (Brazil) by the base factor "1.067" for it reading to be equivalent to the reading obtained at the LMT (Argentina). Survey was conducted over a distributed part of the reference white sample (by the LS 110 instrument) to assess the uniformity of luminance. In the central region of the white reference plate the uniformity of luminance calculated indicate a dispersion factor that is not greater than 0.7%.

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[1] HOVILA, J; MANNINEN, P. 2010. Instruction Manual of Luminance and Spectral Radiance Calibrations. HELSINKI UNIVERSITY OF TECHNOLOGY, Metrology Research Institute, 20p., v. 2.3, 18/feb.