



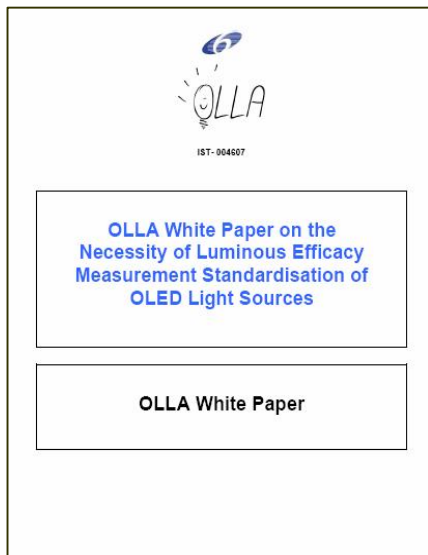
**The OLLA project proposes standard for
OLED luminous efficacy measurement:
*Global comparison of lighting efficiency made possible***

25 September 2007, Frankfurt, Germany

The European OLLA project* today released a discussion paper on the measurement of luminous efficacy for OLED light sources. The goal is to set a measurement standard especially designed for flat light sources. This standard makes a fair comparison of OLED research results possible. The white paper can be downloaded from the OLLA website.

**) 'OLLA' stands for high brightness Organic LEDs for ICT & next generation Lighting Applications*

The efficiency of the transformation of electrical energy into visible light is one of the crucial parameters for lighting applications. Considering the fact that 19% of the worldwide energy consumption is accounted for lighting applications, there is a clear demand for all lighting technologies to achieve greater efficiency.



Whilst conventional lamp technologies already have derived standards for the measurement of lighting efficiency, this field is still open for OLED light sources. Therefore, the OLLA project white paper describes clearly the definition of OLED efficiency and how efficacy has to be measured for flat light sources.

"It is very important for a new lighting technology like OLEDs to have early clear standards defined for its most important light parameters," said Dr. Karsten Diekmann of Osram Opto Semiconductors and co-author of the white paper. "The OLED lamp as a large-area, flat light source bears already a high degree of final luminary characteristics. Therefore we want to set a standard for its efficacy, so that all early adopters of OLED lighting technology have a good expectation of what light stream they can expect".

The development of OLED lighting technology is subject of worldwide attention. The OLLA project delivered in May this year OLEDs with an efficacy of 25 lm per Watt, which is twice as efficient as a standard incandescent lamp. Several other groups reported even higher figures, but without mentioning how these figures were measured.

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"This OLLA white paper is another initial, but important next step towards the development of an OLED lighting industry in Europe," said Peter Visser, project manager of the OLLA project at Philips Lighting." "It supports the standardization of performance and measurement criteria for OLED light sources, which helps to build market acceptance for this light source. We hope that all research groups take notice of this paper, and publish their next results on this OLLA basis. Therefore we welcome all experts in the field to discuss our proposal," Visser concluded.

OLEDs are flat solid-state light sources made from hydrocarbon complexes. OLEDs directly convert electricity into visible light. OLED technology is worldwide recognized as a very promising next lighting technology for professional and domestic applications. OLED materials are based on various organics. Together with inorganic LEDs, OLEDs have the potential for considerable energy savings in lighting applications.

www.olla-project.org

Comments and suggestions for this white paper can be forwarded to: whitepaper@olla-project.org

ADDITIONAL INFORMATION FOR EDITORS:

Links related to this press release

- Official OLLA project website: <http://www.olla-project.org>
- Link towards original picture materials: <http://www.hitech-projects.com/euprojects/olla/downloads.html>

About the OLLA project:

OLLA is a joint research project dedicated to the development of white OLEDs for general lighting applications. The OLLA project has a final efficacy target for OLED lighting of 50 lumens per watt combined with a lifetime of 10.000 hours at 1.000 cd/m² initial brightness.

The consortium consists of 24 entities in 8 European countries. OLLA is partially funded under the IST priority (Information Society Technologies) of the European Union's 6th Framework Programme (FP6).

About OLEDs

OLEDs are a novel and very attractive class of solid-state light sources, which are flat, thin, and very lightweight. OLEDs generate a diffuse, non-glaring illumination with high color rendering. Due to its freedom of design, OLED lighting technology offers many possibilities for new lighting applications. OLEDs could also be used in lighting systems with controllable color, allowing users to customize their light atmosphere. Furthermore, as a highly efficient light source, the technology has the potential of achieving substantial energy savings, without compromising color rendering or switching speed.

OLLA highly recommends the OLED lighting community to publish OLED lighting measurement data on 1000 cd/m² brightness levels with corresponding efficacy and lifetime data in order to make research results comparable.

For a PDF version of the mentioned white paper, pictures, previous press releases, please go to:
www.olla-project.org

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Caption: Since the OLED is a blend-free and diffuse light source itself, it does not need a reflector or lamella system, which makes OLED an intrinsically efficient lighting system.

Picture source: the OLLA project

Note that these pictures may only be used in conjunction with this press release.

Additional project information is available on: www.olla-project.org

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Key data of the OLLA project:

- Project goal: demonstration of OLEDs technology for Lighting Applications
- Project website: www.olla-project.org
- Duration: 45 months, started on 1 October 2004.
- Project budget: approx. €20 million
- EU contribution: €12 million funding
- EU contract number: IST-2002-004607.

The project has the following 24 consortium partners out of 8 EU countries:

Universities:

- Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
- Katholieke Universiteit Leuven (KUL), Belgium
- Rijksuniversiteit Groningen (RUG), the Netherlands
- Institut für Angewandte Photophysik (IAPP), Technische Universität Dresden, Germany
- Universität Kassel, Germany
- Universiteit Ghent, Belgium

Research Institutes:

- Centre National de la Recherche Scientifique - Institut des Matériaux Jean Rouxel de Nantes (CNRS-IMN), France
- Centre National de la Recherche Scientifique - Laboratoire de Chimie de Coordination du CNR (CNRS-LCC), France
- Consiglio Nazionale delle Ricerche (CNR-ISOF), Italy
- Fraunhofer Institute for Photonic Microsystems (IPMS), Germany
- Institute of Physical Chemistry of the Polish Academy of Science, Poland
- Interuniversitair Micro-Electronica Centrum (IMEC), Belgium
- National Nanotechnology Lab (NNL), Lecce, Italy
- VTT Technical Research Centre, Finland

Industrial Partners:

- Aixtron AG, Aachen, Germany
- Merck KGaA, Frankfurt, Germany
- H.C. Starck & GmbH, Germany
- Novald AG, Dresden, Germany
- Osram Opto Semiconductors GmbH, Regensburg, Germany
- Philips Electronics Nederland BV, Eindhoven, the Netherlands
- Philips Technology GmbH ub Lighting, Aachen, Germany
- Philips GmbH Forschungslaboratorien, Aachen, Germany
- Sensient Imaging Technologies GmbH, Wolfen, Germany
- Siemens AG, Erlangen, Germany

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