

LASSIE-FP7

Large Area Solid State Intelligent Efficient luminaires

= Project Summary =

FP7-ICT-2013-11
Photonics

Starting date of the project: 01/01/2014
Duration: 36 months



Basic facts

LASSIE-FP7: Large Area Solid State Intelligent Efficient luminaires

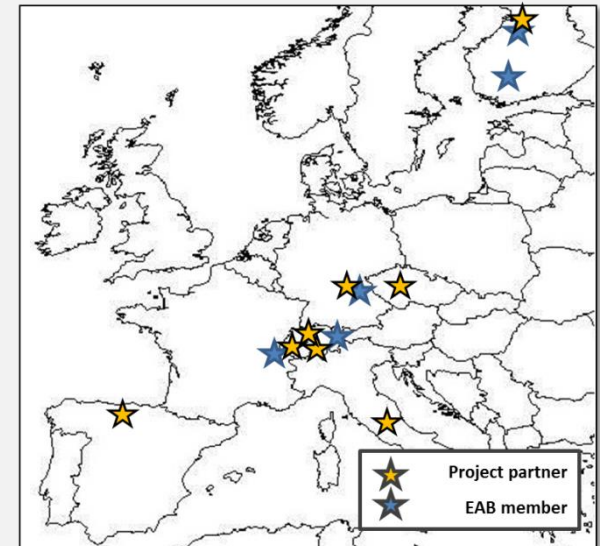
| | |
|-------------------------|---|
| Project number: | 619556 |
| Starting date: | 1 January 2014 |
| Duration: | 36 months |
| Call identifier: | FP7-ICT-2013-11 collaborative project, Objective ICT-2013.3.2 Photonics |
| Number of participants: | 8 from 6 countries |
| Funding scheme: | STREP |
| Main objective: | to implement large area and low-cost intelligent SSL modules with high efficiency and high lighting quality, while assessing their environmental impact |
| Outcome: | a unique integrated SSL module as an alternative to the OLED technology |

Objectives

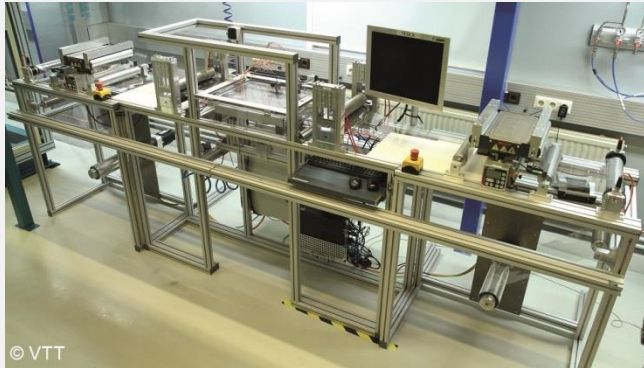
- Project addresses all the limitations of today's **solid-state lighting** (SSL) modules
- **Improvements** in terms of size (area and thickness), flexibility, efficiency, lighting quality, beam-shaping, lifetime, added intelligence production and production/installation costs
- Large-area, roll-to-roll (R2R) processes on thin **rigid to flexible** plastic substrates
- Hybrid approach combining **inorganic LEDs and organic materials**
- **Alternative to the OLED** technology
- Expected outcome: innovative large-area, high-performance, reliable, intelligent, and low-cost **LED-based module for professional and architectural lighting**

Our team

| Participant | Short name | Country | Nature |
|--|------------|---------|--------|
| Centre Suisse d'Electronique et de Microtechnique SA | CSEM | CH | RTD |
| Fraunhofer-Gesellschaft | FhG | DE | RTD |
| Teknologian Tutkimuskeskus (VTT) | VTT | FI | RTD |
| REGENT Beleuchtungskörper AG | REGENT | CH | IND |
| BASF Schweiz AG | BASF | CH | IND |
| Fundacion GAIKER | GAIKER | ES | RTD |
| LFoundry S.r.l. | LF | IT | IND |
| AMIRES s.r.o. | AMI | CZ | SME |



From our work



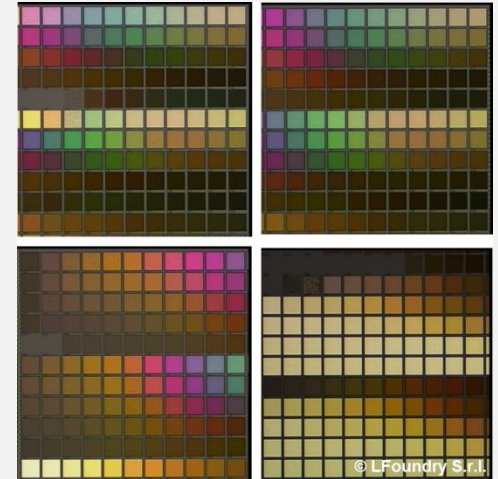
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Tesla2 pilot R2R testing machine



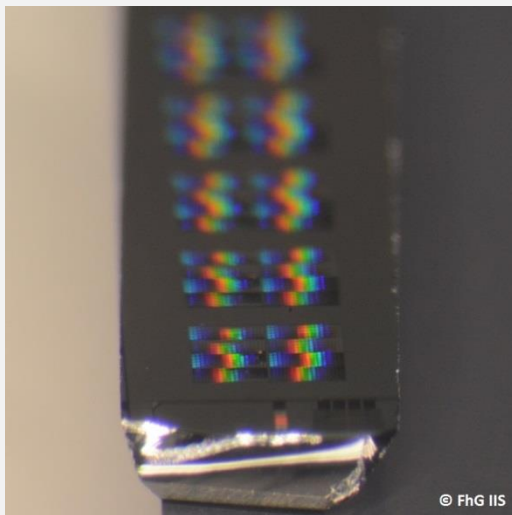
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EVO2200 R2R pilot assembly machine



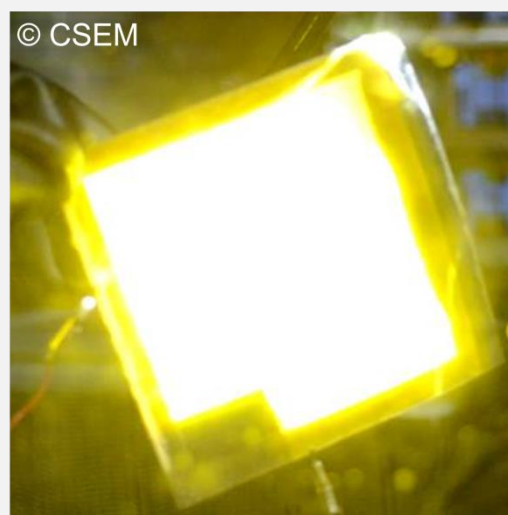
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Optical images from MPW



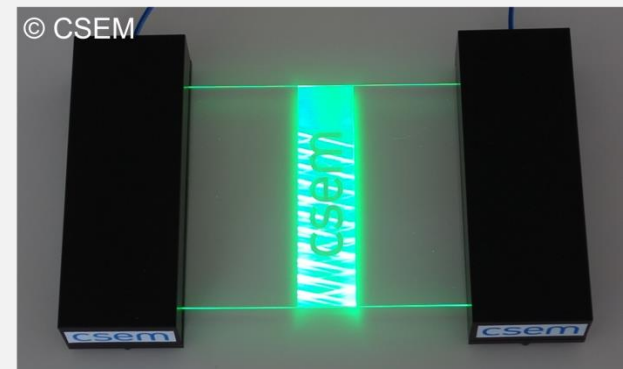
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LFoundry chip



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Large area printable SSL



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Large area LED-based SSL

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