



#### Metrology for Solid State Lighting

### Conclusion

#### Marijn van Veghel

Metrology for SSL Workshop Teddington 24-25 April 2013

Dutch Metrology Institute



## The EMRP project





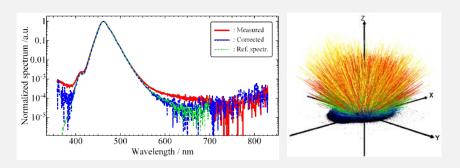
P 2

- Aim: Development, validation and dissemination of adequate metrology for the unambigous and reliable characterisation of SSL
- Started: 1 May 2010
- Duration: 36 months
- 17 partners, 3 REGs
- Coordinated by VSL



### **Project results**



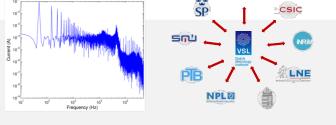


#### Traceability

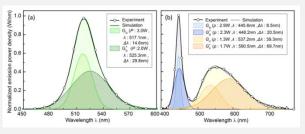


#### Human perception

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Current Spectrun



#### Basic measurement methods



**Quality metrics** 

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- Designers and manufacturers: to make reliable and verifiable product claims
- Policy makers: to develop fact-based policy
- Market surveillance authorities: to combat unfair trade practices
- Users: to select best-fit products for their applications and be confident in their performance

P 4







- Technical results of the project have all been achieved
- Disseminination will continue
- Proposals for follow-up activities are in the making:
  - Life-time
  - Electrical measurements
  - Goniometry
  - OLED

Ρ5







- Any questions left?
- Topics that should not be missed in follow-up projects



### Feedback and more info



- Please fill out the feedback forms
- More information on our website: <u>www.m4ssl.npl.co.uk</u>
  - Public project summary
  - Technical reports and guidelines
  - Presentations of this workshop and past events
  - Final public report (end of June)

Ρ7



# Thanks to all project participants





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# Financial acknowledgements



EMRP European Metrology Research Programme. Programme of EURAMET - EMRP Program coordinated by EURAMET



- The research leading to these results has received funding from the European Union on the basis of Decision No 912/2009/EC.



# Thanks to local organisation



- NPL and their Measurement Network
- Philips Lighting for the drinks reception
- Simon Hall
- Paul Miller
- David Gibbs
- Roger Hughes







# Thank you for coming!

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