KU LEUVEN

TECHNOLOGIECAMPUS GENT

LIGHT&LIGHTING LABORATORY

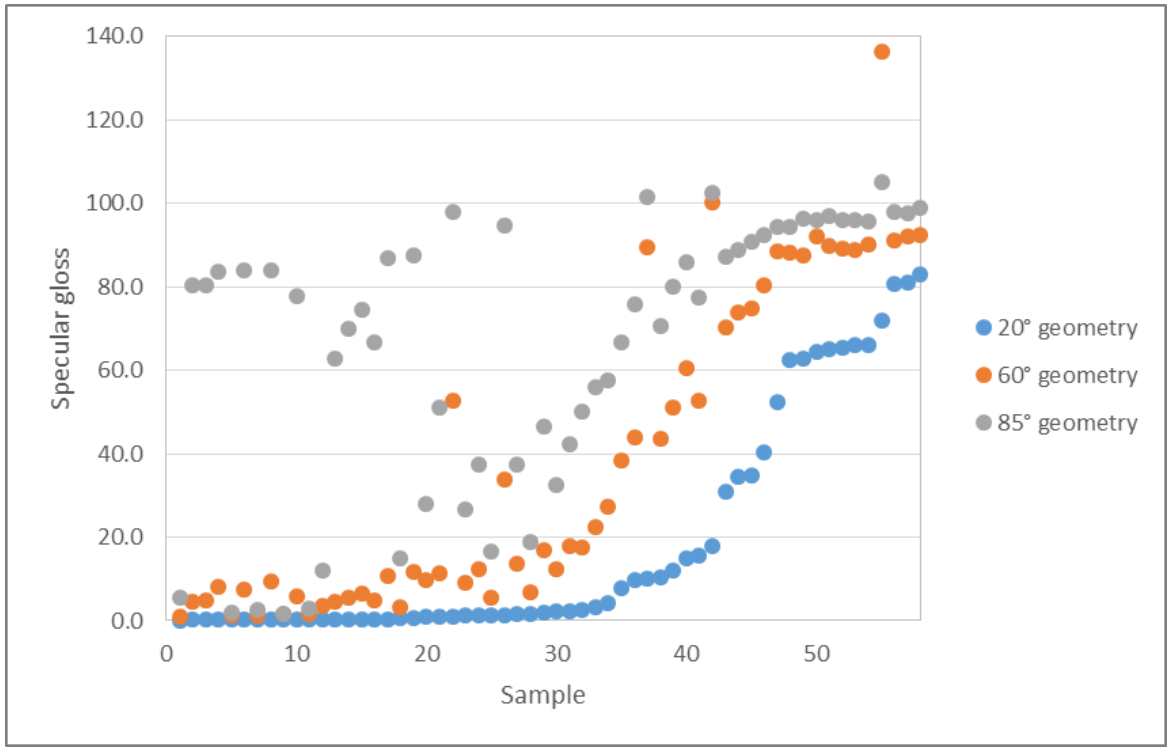
Towards documentary standards for BRDF based quantities

WP 3: Gloss

Frédéric Leloup

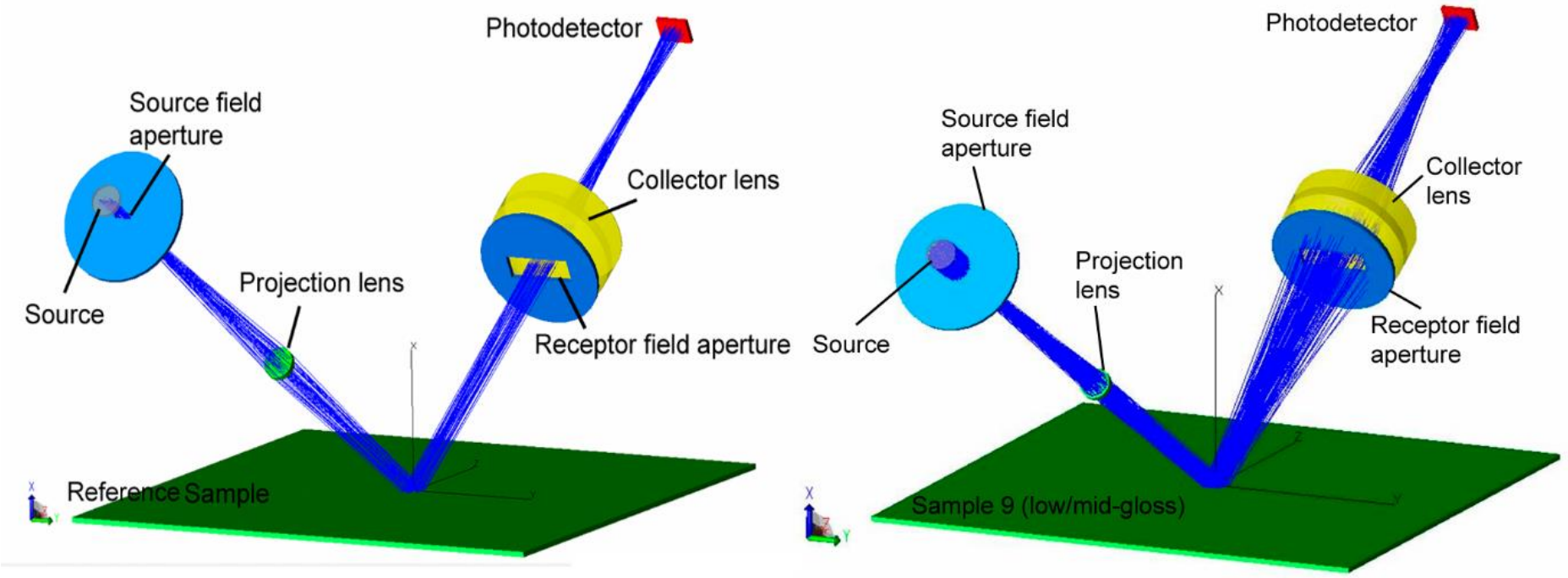
Measurement of specular gloss - Limitations

- Uncorrelated scales



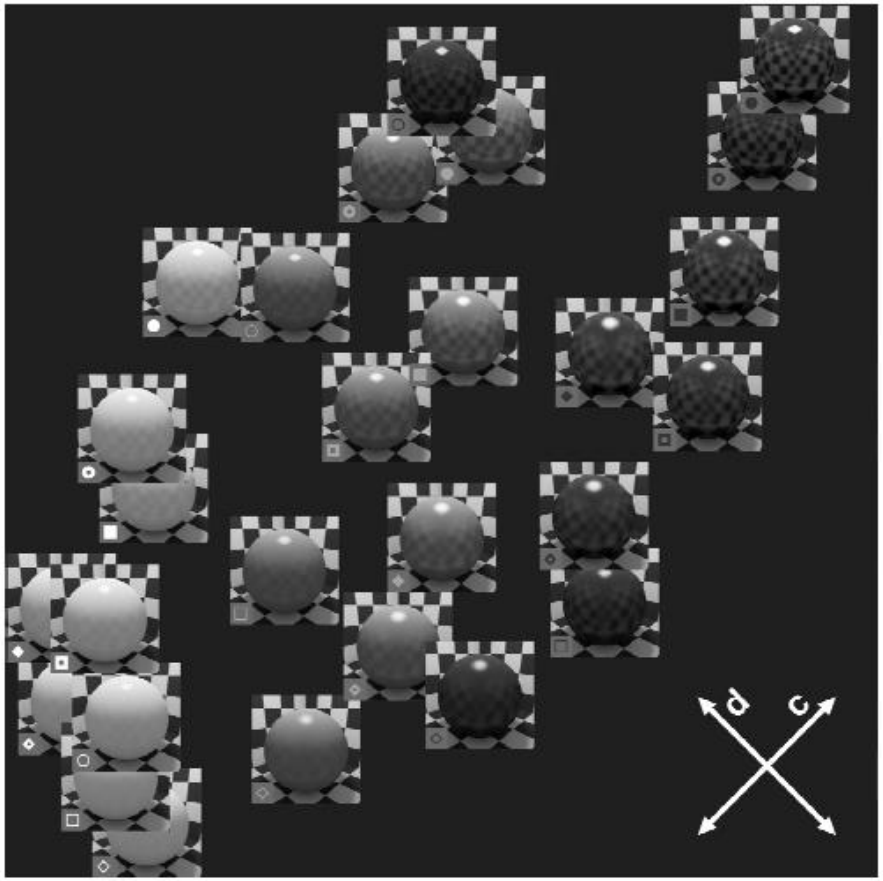
Limitations

- Inter-instrument agreement is inferior to what is generally assumed



Limitations

- Multi-dimensional nature of surface gloss perception



Objective WP 3

- provide guidelines for the optical characterization of surface gloss in a closer agreement with the human visual perception of surface gloss

Task 3.1: CIE Report on gloss measurement and gloss perception

- **A3.1.1** - Database of key research on gloss measurement and gloss perception – KU Leuven (July ’17)
  - Open access -> project website?
    - **Innventia: micro-gloss studies?**
    - **CNAM: final review?**

    QUESTION: WHICH SYSTEM? Mendeley
- **A3.1.2** - Glossary of terms – KU Leuven (Oct ’17)
  - Definition
  - Reference to measurement methods
    - **Innventia / CNAM: final review?**

    QUESTION: Implementation as a web application?
- **A3.1.3/4** - Final report CIE R1-53 – KU Leuven (Jan ’18)
    - **Innventia / CNAM: contributions?**

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Task 3.2: CIE TC on gloss

- **A3.2.1/2** - Create and chair new CIE TC – KU Leuven (May ’18)
  - 5 participants
    - **CNAM, RISE**
    - X
    - X

Task 3.3: Validation of parameters on the physical nature of gloss

- *Study light reflection properties around the specular direction*

- **A3.3.1** - Measurement of specular peak with resolution of human eye – **CNAM** (Sept ’18)

- **A3.3.2** - Modeling of specular reflection from A3.3.1 – **RISE** (Dec ‘18)

Task 3.3: Validation of parameters on the physical nature of gloss

- A3.3.3 – ray tracing simulations of the optical layout of a specular glossmeter – KU Leuven (Feb ‘19)
  - 63 simulations (7 degrees gloss, 3 x 3 aperture dimensions)

- A3.3.4 – Journal paper – KU Leuven (March ‘19)

- **A3.3.5** – Link to ISO 2813 – **PTB**, KU Leuven
  - In contact with Bernd Reinmüller / Nico Frankhuizen – Revision ISO 2813


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