3D luminaire geometry with Relux Vision

Siegbert Debatin
Relux Informatik AG

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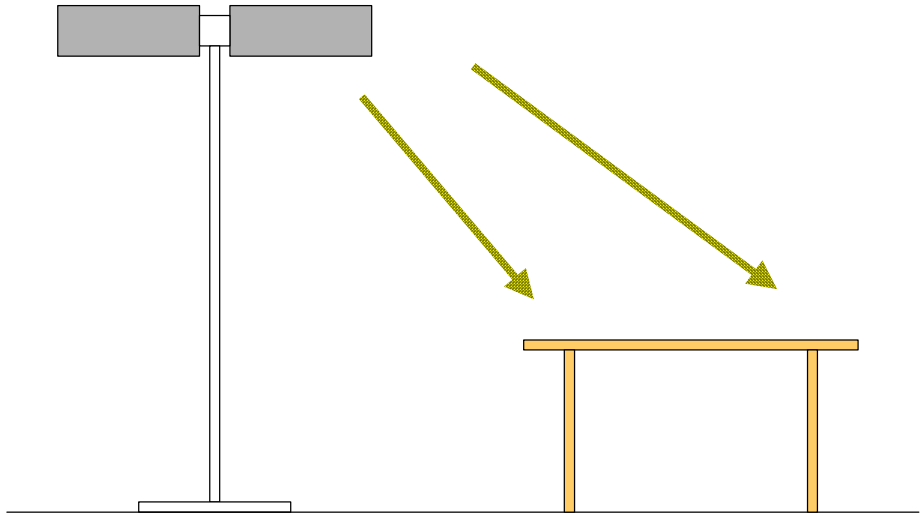
What is Relux Vision

- Relux is an easy to handle tool for (nearly) all kind of light planning.
- Relux is also a consortium of manufacturers, who distribute their data with the program.
- Vision adds Radiance functionality to Relux.

Principles of luminaire geometry

Each luminaire illuminates:

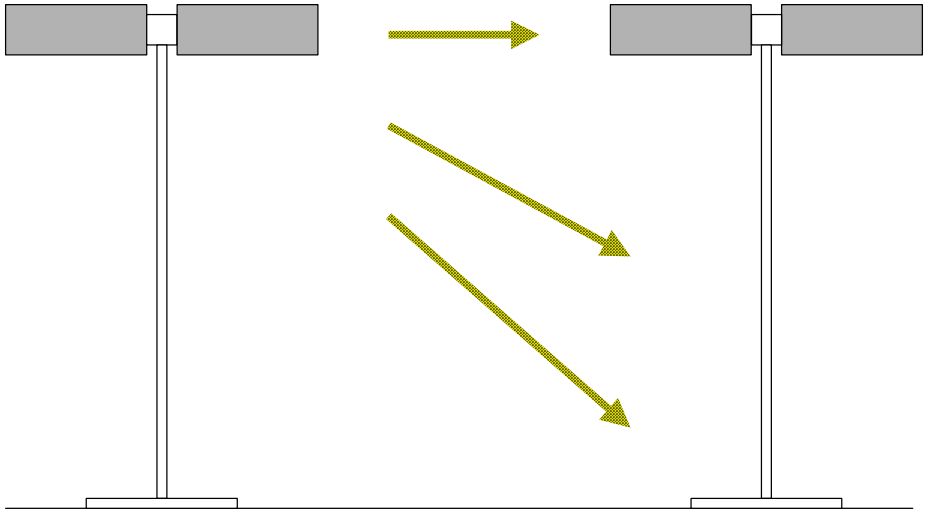
- its environment



Principles of luminaire geometry

Each luminaire illuminates:

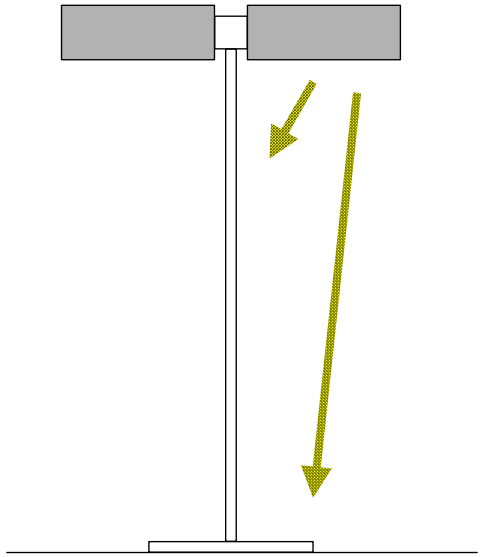
- all other luminaires



Principles of luminaire geometry

Each luminaire illuminates:

- parts of itself



Geometric layout of a luminaire

Subdivision of a luminaire into

- measured geometry (light emitter)
- additional geometry

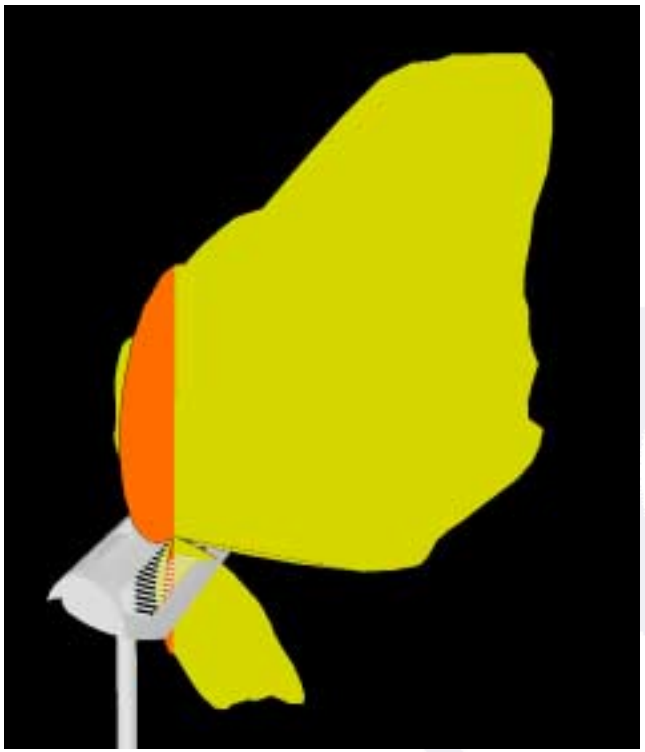
Geometric layout of a luminaire

Examples

- Measured geometry
- Measured geometry with additional geometry
- Multiple measured geometries with additional geometry
- More complex types

Luminous layout of a luminaire

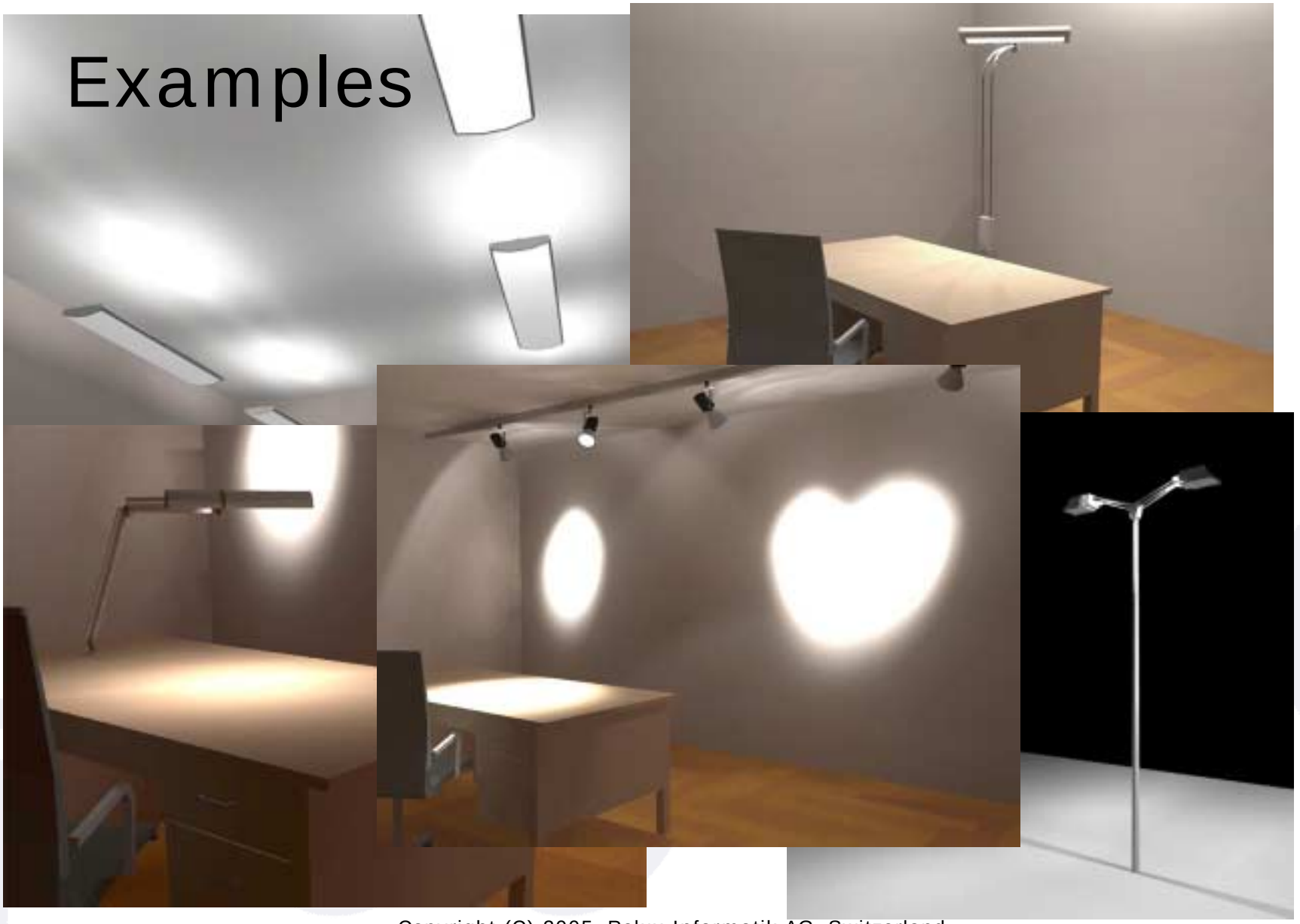
- Insertion point of photometry
- Light emitting surfaces (real and virtual)
- Materials



Export to Radiance

- Light distribution curves of all types are automatically converted
- Measured geometry will be embedded into an illum box
- Light emitting surfaces get a glow
- Additional geometry is handled as is

Examples



Problems

„illum“ as an area light source can cause

- Visualization errors
- Wrong measurement results

Possible solution:

„illumEx“: an illum with an assigned geometry (mesh), which casts no shadows in the direct part

Conclusion

- Relux offers luminaire database with complete luminaires
- Powerful 3D format
- Market pressure for 3D geometry
- Publically available
- Export for Radiance