



SPEOS for SOLIDWORKS®
EDUCATION



Our software SPEOS is **World Leader** and **industry standard** in the creation of Head Lamp, Rear Lamp and Interior Lighting



Our customers don't find trained students

- On this software
- With the specific skills

OPTIS Aerospace & Automotive Customers will appreciate your skilled students on SPEOS



OPTIS Lighting & Electronics Customers will appreciate your skilled students on SPEOS



Our interest in having you, using our software ?



Digital Bentley Car in a Virtual Reality center on OPTIS Software



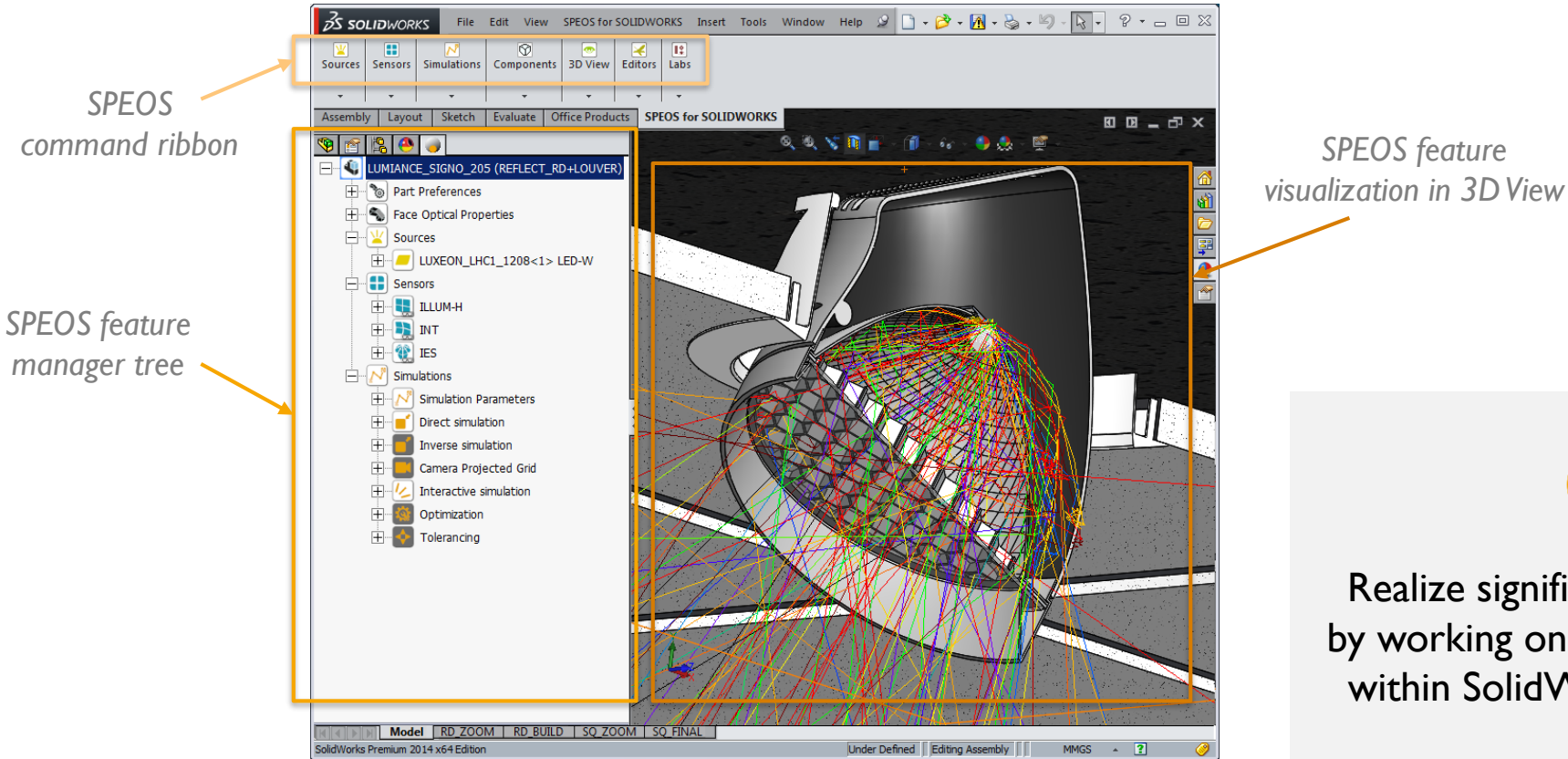
Helping Students to be competitive and to fit the industry requests



Reinforce our leadership



Helping our prestigious customers to find skilled people : increase your students employment rate



Realize significant **time savings** by working on your design directly within SolidWorks environment.

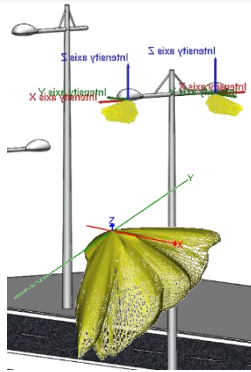
Students will become Light Modeling expert



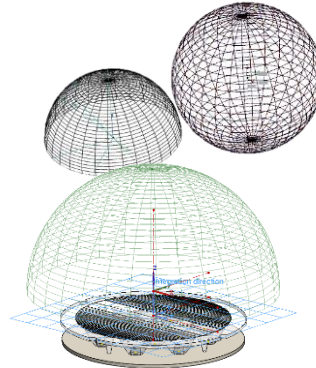
OPTICAL PROPERTIES



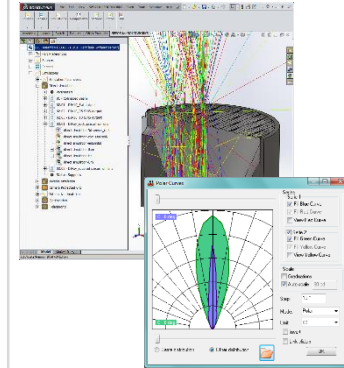
SOURCES



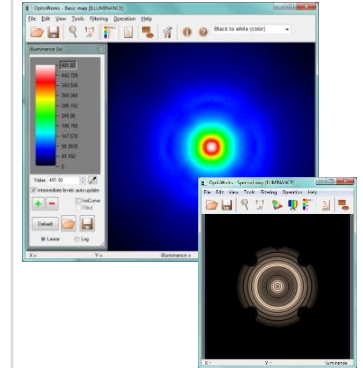
SENSORS



SIMULATION

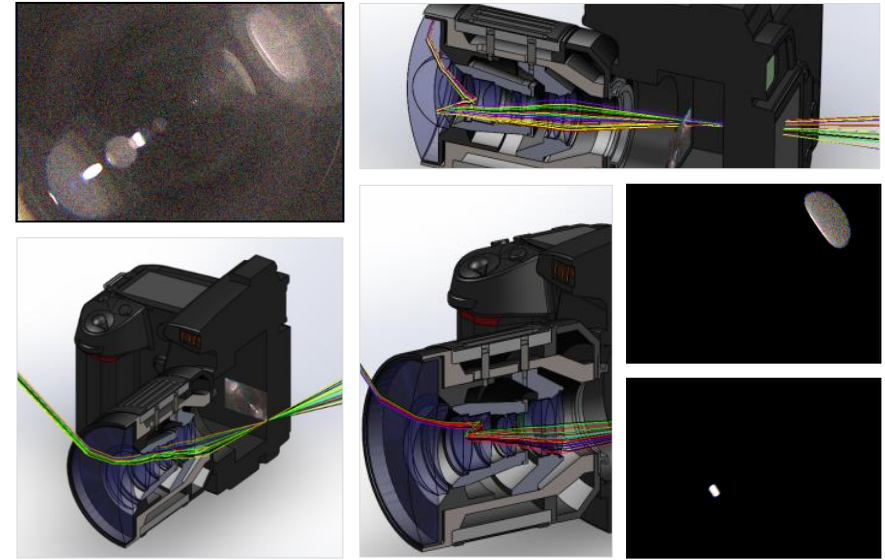
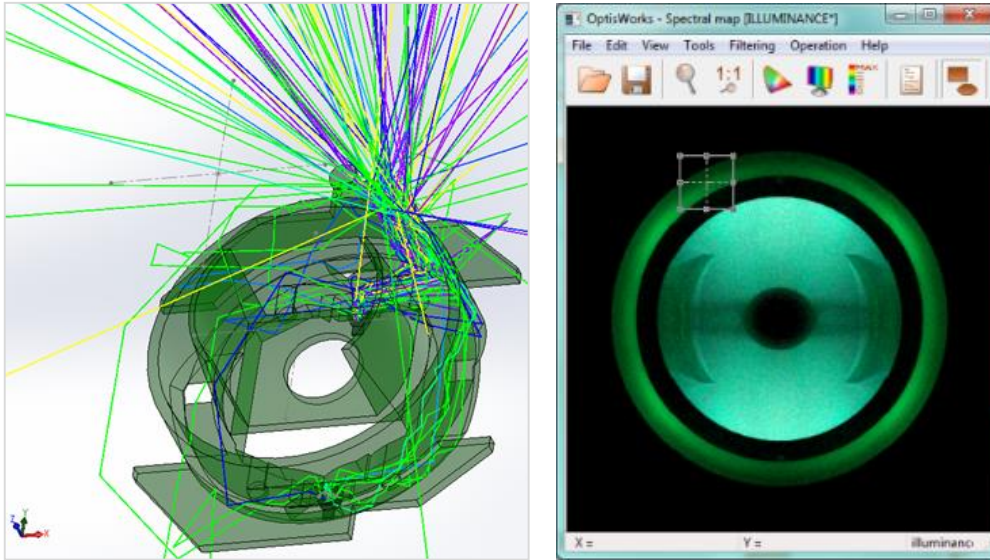


RESULTS ANALYSIS



- ✓ Define your own light sources, material and surface properties or directly use references from the available extensive library
- ✓ Explore light propagation with **interactive 3D ray tracing**
- ✓ Position your virtual sensor as you would do in a laboratory
- ✓ Simulate and **analyze photometric and radiometric quantities**: Illumination, irradiance, radiant intensity, luminance and radiance

Students will become Light Expert

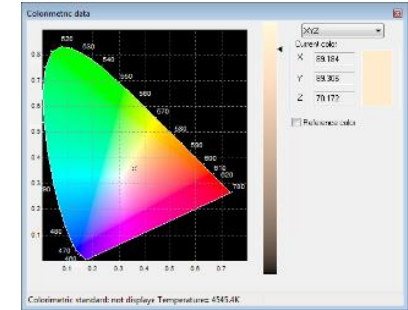
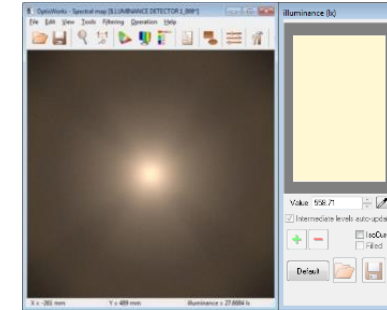
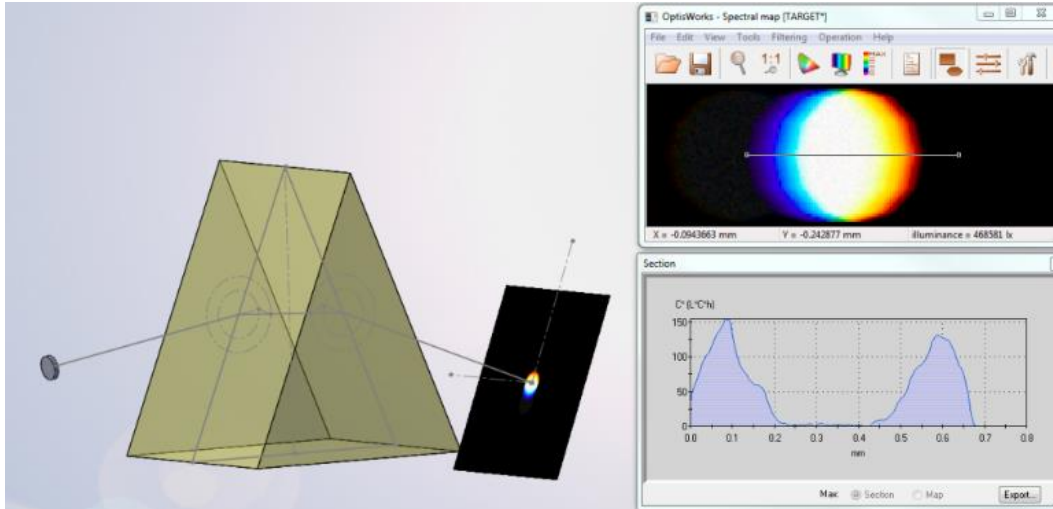


Perfectly understand the behavior of lighting systems, including how and where the light travels, and identify potential hot spots.



Interactively study the contribution of each part of the 3D systems on the light propagation.

Students will become Colorimetry expert



Color rendering index (CRI) CIE 13.2-1995

| No. | Approximate Munsell notation | Color appearance under daylight (D65) | Appearance under reference illuminant | Appearance under current spectrum | R _i |
|-------|------------------------------|---|---------------------------------------|-----------------------------------|----------------|
| TC901 | 7.5 R 6/4 | Light greyish red | | | 75.1 |
| TC902 | 5 Y 6/4 | Dark greyish yellow | | | 85.6 |
| TC903 | 5 GY 6/8 | Strong yellow green | | | 88.6 |
| TC904 | 2.5 G 6/8 | Moderate yellowish green | | | 78.6 |
| TC905 | 10 B5 6/4 | Light bluish green | | | 75.1 |
| TC906 | 5 PB 6/8 | Light blue | | | 78.9 |
| TC907 | 2.5 P 6/8 | Light violet | | | 85.9 |
| TC908 | 10 P 6/8 | Light reddish purple | | | 65.9 |
| TC909 | 4.5 R 4/13 | Strong red | | | 7.4 |
| TC910 | 5 Y 8/10 | Strong yellow | | | 64.1 |
| TC911 | 4.5 G 4/8 | Strong green | | | 74.1 |
| TC912 | 3 PB 3/11 | Strong blue | | | 62.2 |
| TC913 | 5 VR 6/4 | Light yellowish pink (human complexion) | | | 79.4 |
| TC914 | 5 GY 4/4 | Moderate olive green (leaf green) | | | 93.9 |
| TC915 | 1 YR 6/4 | Asian skin | | | 74.3 |

R_a: 92.1 (D47) Colorchatty Difference (DC): 0.00 (90/70)

- Utilize full spectral data in your photometric analysis.
- Calculate true color as opposed to a projection of the spectrum in the 3 primary colors and obtain spectral distribution and the position in the tri-chromatic graph.

How to access ? Deployment



- You need to have SOLIDWORKS Education installed
- Install SPEOS EDUCATION for SOLIDWORKS from OPTIS portal
- Licenses are managed through a license server with tokens. It is installed in the school or university
- Students & Teacher can benefit of SPEOS EDUCATION for SOLIDWORKS on the campus
- Support is available for the Teachers
- OPTIS can provide Teachers and training courses



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