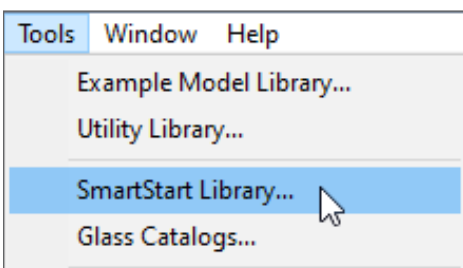
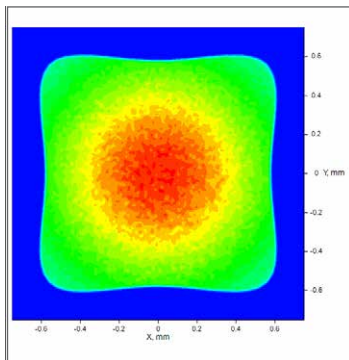
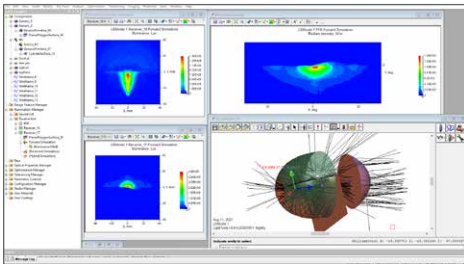
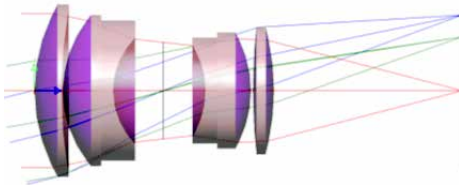


What's New in LightTools Version 2022.03

Upgrade Your Illumination Optics Designs



Expanded CODE V and LightTools Interoperability

New and improved interoperability features between CODE V and LightTools enable designers to easily simulate optical systems that contain imaging and non-imaging components and save product development time. CODE V surface-based models are automatically converted to solid models in LightTools for high-fidelity optical product simulations. Design updates are seamlessly maintained between the products, including all optical properties, receivers, and sources.

Surface-Based Modeling

Surface-based modeling in LightTools allows imported geometries to be ray traced as free-standing surfaces and as parts of solid geometry for more efficient, flexible optical system simulations. New modeling and ray trace capabilities are particularly useful for designing illumination components in AR/VR headsets, LiDAR, automotive cameras, and head-up displays.

Simulation Enhancements

Simulation enhancements that provide additional support for AR/VR, head-up displays, and LiDAR optical systems include:

- Source modeling improvements like new aiming options and apodization distributions, the ability to use monochromatic source spectrum types in configurations and optimization, and the ability to set source polarization
- Backward ray tracing for Optical Path Length analysis
- Multi-wavelength sources and complex field data export for coherent simulations
- Diffraction efficiency calculation for gratings

New Module: SmartStart Library

Optical systems can be virtually prototyped with ultimate physical realism using the LightTools SmartStart Library, which provides an extensive database of measured material and optical property data. With SmartStart Library assets, designers can quickly decide which materials to use in their optical systems to optimize product performance and save costs.

For more information, please contact Synopsys' Optical Solutions Group at (626) 795-9101, visit [synopsys.com/optical-solutions/lighttools](http://www.synopsys.com/optical-solutions/lighttools), or send an e-mail to optics@synopsys.com.