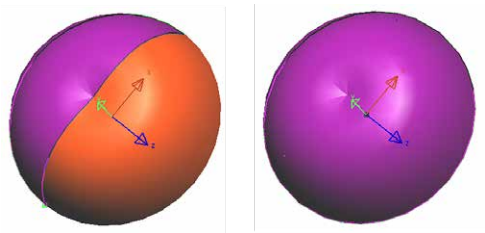
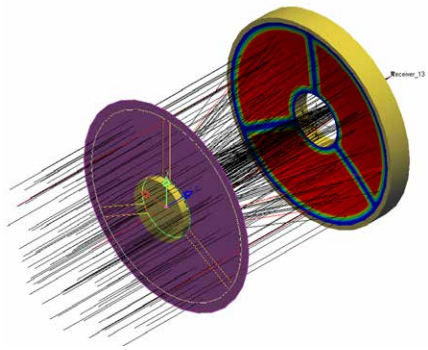
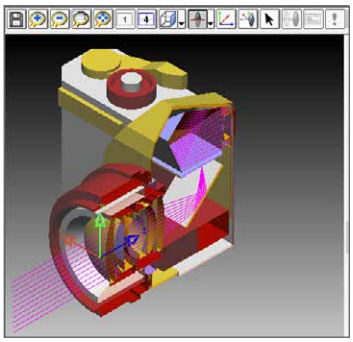
What's New in LightTools Version 2023.03

Upgrade Your Illumination Optics Designs







Enhanced Geometry Import Features

LightTools supports industry-standard CAD formats. Imported CAD data can be used in models for placement and simulations, but the surfaces lose their parameters. With the capabilities in this release, you can now convert imported surfaces to lens surfaces, which restores shape parameters and enables imported CAD data to be used with LightTools' powerful optimization and tolerancing features.

Expanded Lens Surface Definitions

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. It can be particularly useful for designing illumination components in AR/VR headsets, LiDAR, automotive cameras, and head-up displays. This release includes new ways to define surfaces shapes and apertures.

More Robust Coherence and Polarization Simulations

Simulation enhancements that provide additional support for AR/VR and microLED designs include:

- Improved source polarization that simplifies polarization input and allows you to control the starting phase of the polarization state.
- To assist with coherence simulations, you can view data from the coherent field in a tab added for illuminance meshes.

Improved 3D Viewing to Explore Model Details

In CAD software, section views are widely used by designers to show the internal details of a complex model. LightTools now provides this capability to help illumination designers view internal details, understand surface relationships, and study the effects of rays in the system.

New Help System

The LightTools help system has been revamped for the 2023.03 release. The help system now uses the default installed browser to provide easy access to help topics.

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

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