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.

API Access to Interactive GUI

CODE V is COM-enabled and can be used as a server application for other COM-enabled applications, such as MATLAB, for specialized analysis tasks. In this release, API access to the interactive CODE V GUI provides improved usability.

Improvements in 3D Product Visualization

CODE V can now create section views in V3D to produce sectioned planes in several orientation along coordinate axes. This supports more accurate visualizations of lens system cross-sections.

Updates to Diffractive and HOE Optical Elements

Improvements to diffractive surfaces and volume holographic optical elements (HOEs) support the development of holographic surfaces for head-up displays and AR/VR headsets.

Automatic Adjustment of Index of Refraction

Automatic adjustments in CODE V to material indices for varying temperature and pressure conditions support advanced modeling of aerospace and defense systems. A new setting automatically updates the index of refraction for materials based on manufacturer-provided dn/dT formula coefficients.

Workflow Enhancements

This release includes many other enhancements to streamline design workflows, including new lens and optical element definitions, new user interface customizations, updated glass catalogs, and new macros. Contact us today for a demo to learn more.

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