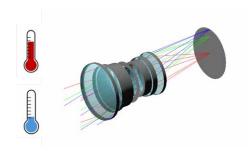
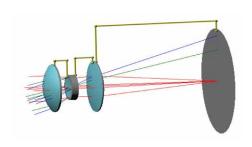
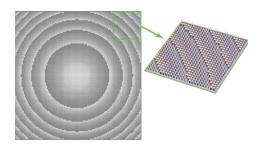


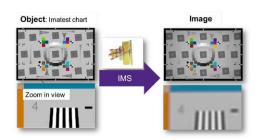
# What's New in CODE V Version 2024.03

Upgrade Your Imaging Optics Designs









#### Multi-Environment Coupling

CODE V's Multi-Environment Coupling feature allows users to model and optimize athermalized spacer-based lens designs across a wide range of environmental conditions. The models consider changes in refractive index and substrate prescription changes due to different temperatures, pressures, and mounting links. An interoperability feature enables export of Multi-Environment Coupling models to LightTools for further analysis.

#### Visualization Capability for Athermalization

Athermalization is a key part of optical design in which engineers consider the effect of temperature changes on lens mounting. CODE V includes a new visualization tool in V3D that assists with this process. The tool shows engineers how the housing interacts with glass elements and their interconnections, without having to know the details of the optomechanical mount.

## CODE V MetaOptic Design

A breakthrough in optical technology, meta optical surfaces are thin, flat surfaces that can augment traditional lenses. These complex surfaces can now be efficiently designed in CODE V using a diffractive optic property modeling process. Note that this tool is an add-on to CODE V that comes with an additional fee and requires Synopsys Common Licensing.

## Faster Image Simulation

The 2D Image Simulation (IMS) feature, which simulates imagery produced by the lens defined in CODE V, includes a significant speed enhancement in this release, particularly with machines using multiple processing cores.

## **Expanded Example Model Library**

The CODE V Example Model Library helps you quickly learn how to use specific features, including Global Synthesis, Beam Synthesis Propagation to analyze diffraction-related characteristics, and SpecBuilder for setting up lens system specifications. The library includes 11 new examples in this release.

For more information, please contact the Synopsys Optical Solutions team at (626) 795-9101, visit <a href="mailto:synopsys.com/optical-solutions/codev">synopsys.com/optical-solutions/codev</a>, or send an e-mail to <a href="mailto:optics@synopsys.com">optics@synopsys.com</a>.

