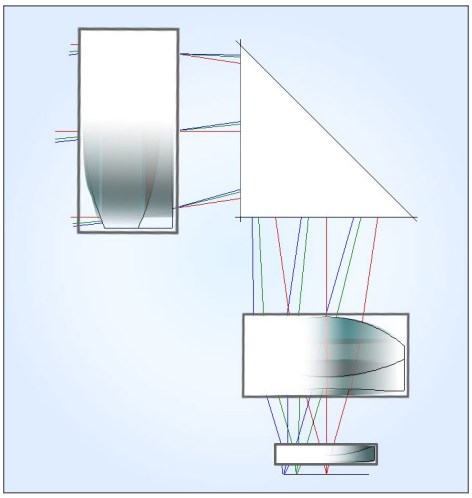
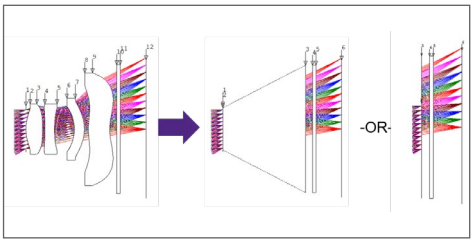
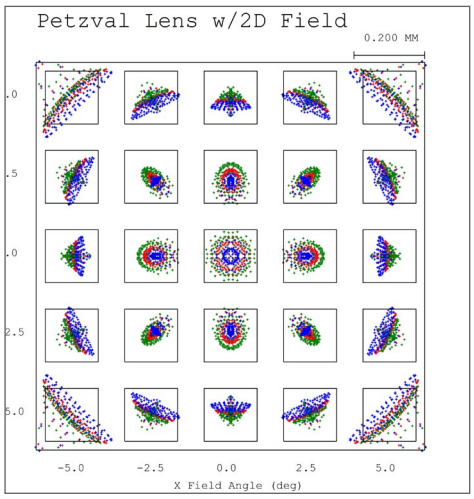
What's New in CODE V Version 11.5

Design, Optimize, and Fabricate Superior Imaging Optics







Protect Your IP with CODE V's New Hidden Lens Module

CODE V's new Hidden Lens Module (HLM) allows you to create an optical component that represents all or part of the CODE V optical surface prescription without exposing design details. This feature provides accuracy and flexibility for secure design collaboration. Encrypt all or a portion of a lens system to share with other CODE V users to enable performance analysis of the design without disclosing proprietary details. You can create the encrypted .HLM file used by the HLM surface directly, without modifying the current lens, or you can convert the current lens to its HLM equivalent. The thickness of the HLM can be arbitrary, and the rear surface of the HLM can be optionally tilted/decentered to define an accurate envelope geometry for a tilted or decentered system.

Achieve Superior Optimization Results

CODE V now includes an alternative optimization method for computing second derivative information for damped least squares options. Based on the Broyden-Fletcher-Goldfarb-Shanno algorithm, this method can lead to better results for problems where the second derivative matrix is ill-conditioned, such as when your system optimization setup requires a similar number of constraints and variables. Easier access to optimization data enables users to create powerful user-defined constraints and new error functions supporting complex, iterative optimization with the ability to calculate dynamic re-weighting of constraints.

Design Freeform Optics Faster

CODE V includes sophisticated freeform surfaces to achieve superior correction in systems with significant tilts and decenters. These surfaces are particularly useful for users designing AR/VR systems and other systems that require compact, lightweight optics. CODE V's unique 2D coefficient table is now enhanced with new controls that facilitate fast, easy assessments of freeform surface symmetry characteristics.

Save Time with Speed Improvements to AI-Optimized Glass Selection

CODE V's Glass Expert feature for engineering-savvy glass substitution has been improved to execute faster, and to validate the starting system against weight, cost, transmission, and thermal input specifications.

For more information or to start your free 30-day evaluation, 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.