

The OpticStudio Structural, Thermal, Analysis and Results (STAR) module allows engineers visualize and analyze the impact of structural and thermal factors within OpticStudio. Below is a list of the features and benefits delivered by the STAR module.

Feature	Benefit
FEA Data Agnostic	Users can load FEA datasets from any FEA package to see the impact on their optical performance.
Automatic RBM calculation and removal	The STAR module will automatically calculate the rigid-body motions and remove prior to fitting making it easier to get started right away.
Data Alignment	Remove the guess work. Visualize FEA datasets and optical surfaces at the same time to verify alignment.
Fit Assessment	Visual and quantitative results inform users about the quality of fit and provides confidence in the results.
Coordinate System Transformation	Easily convert between local and global coordinate systems with one click.
Structural Deformations	STAR module enables users to see the impact of structural deformations on their lens surfaces.
Thermal Profile	STAR module enables users to see the effect of thermal loads on the optical performance .
Non-uniform GRIN	The STAR module accepts non-uniform data from FEA packages and removes the need for uniform re-sampling. This results in less information loss and higher accuracy.
Direct Import into ZOS	Perform STOP analysis inside the OpticStudio environment and use industry-leading optical analyses to assess system performance.
Work with original system	Add FEA data to the original design file instead of a different representation of your design.
Built in visualization	Utilize built-in visualizations to verify alignment and assess impact of FEA datasets on optical performance.
API	Powerful STAR-API connects directly with the ZOS-API and enables users to customize and automate their workflows. Assess performance over multiple time-points and load conditions to better understand how your system will perform in the real-world.