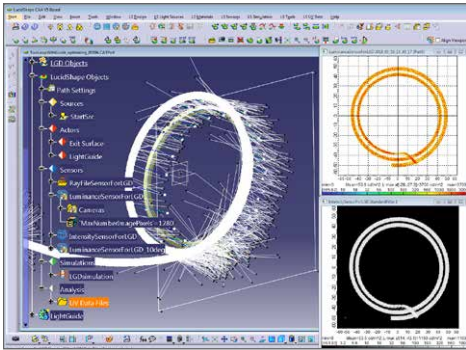


LucidShape CAA V5 Based Version 2018.09 New Features

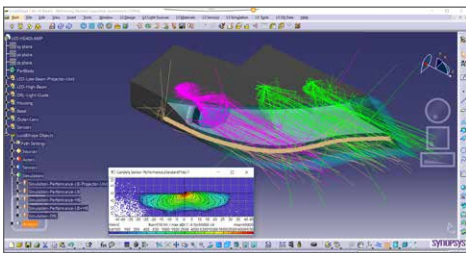


LucidShape CAA V5 Based offers the most comprehensive CATIA-based optical simulations of automotive lighting products. The product's fast, accurate modeling and analysis of part-level models and product-level assemblies have been enhanced with the following major new features.

Surface Sensor

Get high-accuracy analysis of illuminance and irradiance on curved surfaces.

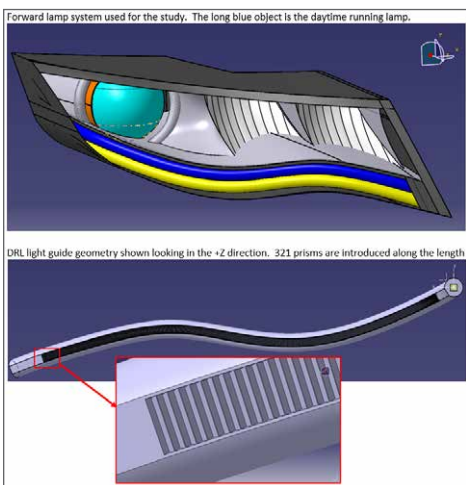
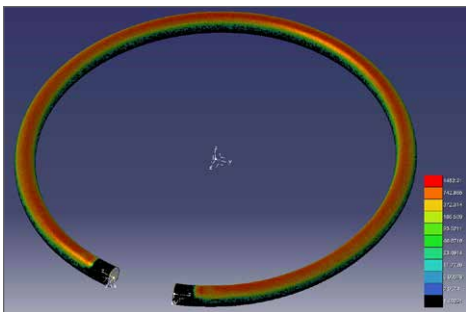
- Evaluate performance for interior ambient illumination and uniformity of light extraction near light guide surfaces
- Analyze hot spots on mirrors, lenses, and other highly complex or curved lamp components in exterior lighting systems
- Analyze the illuminance and irradiance distributions as a false color map directly in the LucidShape CAA part design view
- Interactively measure the value at a specific location of the surface sensor, and export the simulation data to an ASCII file for additional analysis if needed



Light Guide Design Module

The latest Light Guide Design Module helps designers model and optimize automotive light guides and their extraction features faster and more flexibly.

- Create, optimize, and switch between multiple light guides in a part, save and return to optimization states and create design tables
- Optimization system types allow you to set up and optimize eight standard system configurations
- Optimize systems with sources on both ends of the light guide that can be non-symmetric or symmetric



Extended GPUTrace™ Support

GPUTrace is now available in the LucidShape CAA ray history sensor feature and the fixed random seed option for optical simulations.

- Uses graphics processing units to deliver simulation speed increases by orders of magnitude compared to multithreading capabilities
- Provides faster analysis of signal lighting functions and reduces the number of design iterations needed to achieve lit appearance requirements and regulatory compliance

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