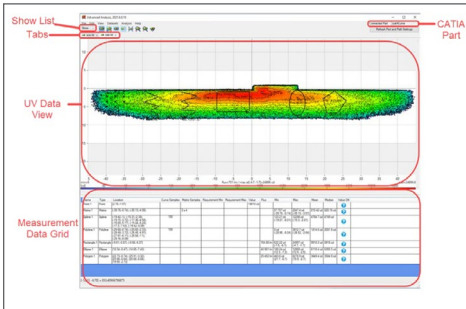


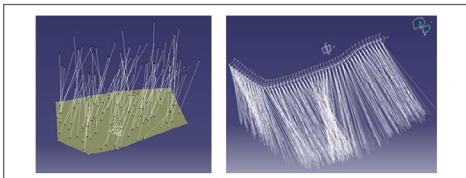
# LucidShape CAA V5 Based Version 2021.06 New Features



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.

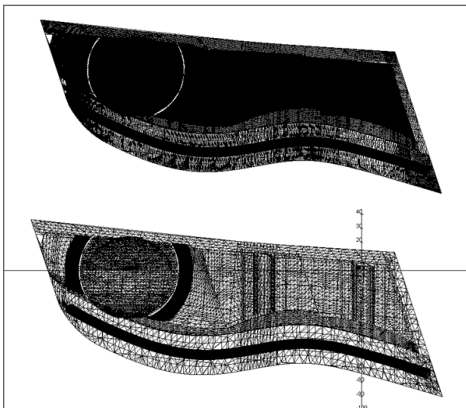
## Advanced Analysis Features

LucidShape CAA introduces new Advanced Analysis capabilities to consolidate and automate design evaluations.



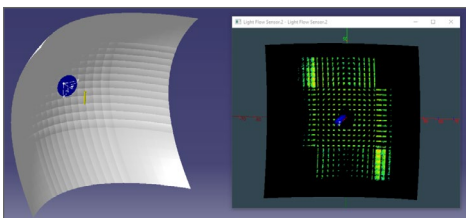
## Accurate Source Modeling and Positioning

LucidShape CAA now offers enhanced source modeling and positioning features to meet the demands of applications that require light sources with complex shapes. You can make any surface a light source. You can also group together axis systems and use them to easily create multiple duplicate light sources that must be placed in different positions or patterns.



## Precise Performance Simulations

New options have been added to optimize optical simulation accuracy and speed in LucidShape CAA. When running a tessellated simulation, you can optionally specify the tessellation parameters for individual actors, which can be different from the global tessellation settings. This gives you flexibility to target selected actors for high-accuracy simulations, while optimizing overall simulation performance by keeping the remaining tessellation less dense.



## Macrofocal Reflector and Lens Design

The MacroFocal reflector and lens design features have been enhanced to give you a new way to create unique style characteristics for signal lighting. The new grid of curves option enables you to define a base grid for the reflector or lens by specifying a set of user-created quasi-horizontal and quasi-vertical curves.



## Prism Extractors and New Laser-Etched Light Guides

Automate the construction, analysis, and optimization of light guides and their extraction features. This release simplifies the creation of custom light guide shapes. A new surface mode light guide provides an alternative light-weight light guide construction, benefiting from significantly faster geometry construction. In addition, an early version of the Texture mode light guide capability in this release allows you to model and optimize laser-etched light control structures.

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