

LucidShape Application: Design Feasibility Study

Overview

An automotive OEM is designing a projector headlight under substantial schedule constraints. Because of nondisclosure agreements, there is a risk that the OEM will receive the customer requirements (material properties and dimensions) too late to meet development deadlines.

The Challenge

An OEM depends on its supplier's optics division to make design feasibility decisions. The expertise of creating final CAD models is completely with the suppliers. To understand a lighting concept and prove its feasibility, OEM light engineers need to:

- Design representative lighting models with minimum effort
- Develop to a valid state so that a conclusion and decision making point could be reached
- Proceed quickly and deliver a reliable prognosis for the next phase of development

The Solution

LucidShape® provides the following solutions to this design challenge:

- Enables the OEM to conduct design feasibility studies using specialized tools and an efficient workflow
- Makes it possible to create working models for all major applications
- LucidShape's simulation efficiency reduces the analysis cycle. Built-in regulation testing and report functions allow easy evaluation and exchange of results
- Empowers the OEM to make independent investigations and come to their own design feasibility conclusions

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

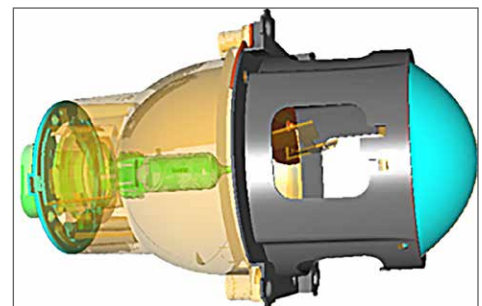
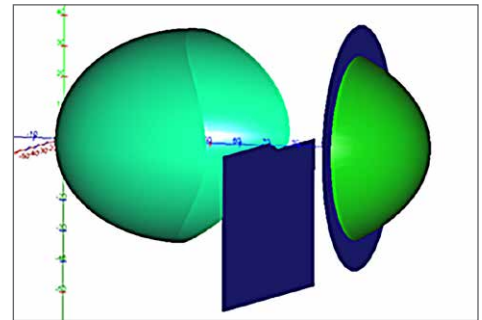


Figure 1: Ultra-fast feasibility investigations of models for proofs of concept in LucidShape (top) are much faster than the finalized complex and time-consuming CAD-based construction models (bottom).