

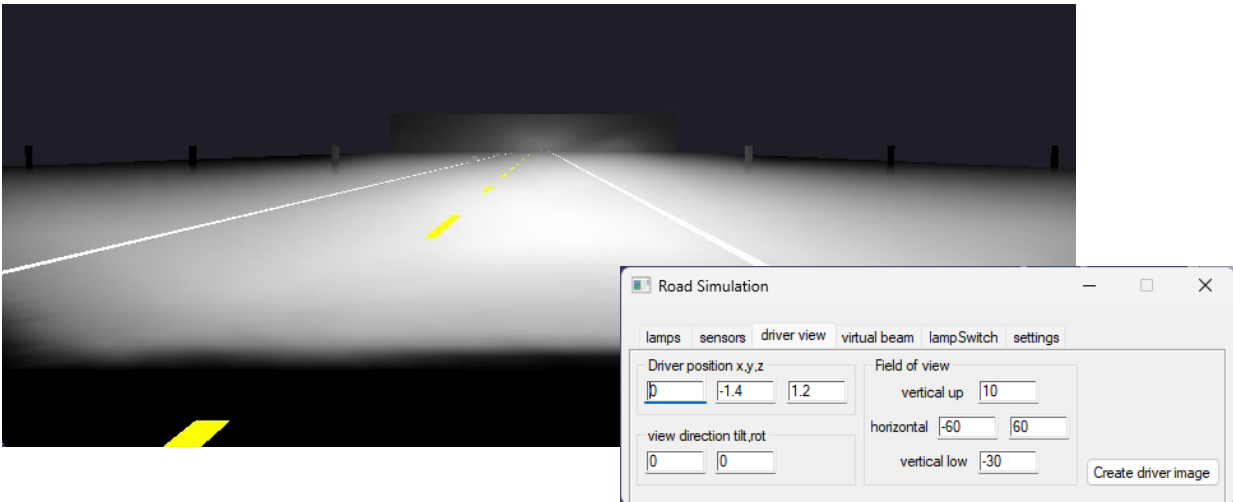
LucidShape CAA V5 Based 2026

Accelerate Automotive Lighting Development Inside CATIA V5

Evaluate Lighting Performance in Real Time

NEW: Static Road Simulation

Static Road Simulation provides an interactive 3D environment for evaluating roadway illumination directly within LucidShape CAA. Engineers can assess multiple lamp configurations, aiming conditions, and driver viewpoints while exploring virtual beam concepts for rapid design evaluation.



Benefits

- Visualize roadway illumination instantly
- Compare multiple aiming scenarios
- Evaluate driver field of view
- Accelerate concept development and validation

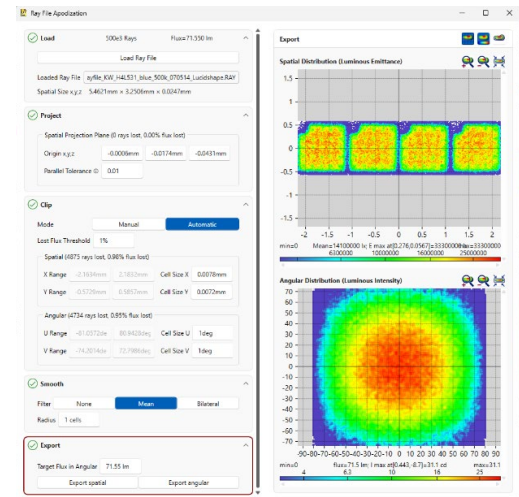
Build More Realistic Source Models

NEW: Light Source Apodization

Convert measured ray files into reusable source models while preserving spatial and angular emission characteristics. The resulting models support effectively unlimited ray generation for higher-fidelity simulations.

Benefits

- Improve source-model fidelity
- Reduce simulation noise
- Enable reusable light source libraries
- Support near-field luminance studies



NEW: Spectral Power Distribution Export

Export spectral power distributions from spectral LIDs into reusable files for downstream color and appearance studies. Engineers can maintain consistent spectral behavior across simulations and simplify workflows involving mixed-emitter systems.

Benefits

- Streamline color analysis workflows
- Improve repeatability between projects
- Support CIE and color-target evaluations

Compare Appearance with Greater Confidence

NEW: Luminance Clipping

Luminance Clipping enables multiple HDR luminance images to be displayed using a common luminance range, allowing direct visual comparisons between lighting functions and design alternatives.

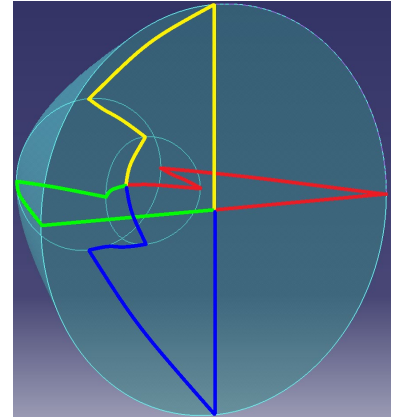
Benefits

- Consistent brightness representation
- Improved appearance assessments
- Easier comparison of design variations

Enhanced Optical Design Workflows

Collimator Enhancements

New collimator capabilities provide greater design flexibility and control for DRLs, turn indicators, and edge-lit optical systems. Engineers can independently optimize multiple regions of the optic while accounting for near-field and far-field performance requirements.



Highlights

- Four-curve, per-quadrant control
- Near-field and far-field optimization
- Front-shape-aware calculations
- Improved handling of multiple surface interactions

Mini Pillow Enhancements

Expanded Mini Pillow workflows support CSV-based editing, enabling efficient modification of large facet arrays and accelerating texture and uniformity optimization.

Benefits

- Edit hundreds or thousands of facets efficiently
- Apply textures programmatically
- Reduce repetitive manual work
- Accelerate final appearance refinement

Stay Ahead of Global Requirements

LucidShape CAA V5 Based 2026 incorporates significant updates to automotive lighting regulations and benchmark workflows, helping teams evaluate compliance earlier in the design cycle.

Included Updates

- ECE R148-01 and R149-01
- China GB 4599-2024 and GB 5920-2024
- SAE J595
- IIHS benchmark enhancements
- C-IASI updates
- C-NCAP updates

Benefits

- Reduce manual setup effort
- Support global vehicle programs
- Improve benchmark readiness
- Enable earlier compliance assessment

Additional Productivity Enhancements

- CATIA R36 support for improved interoperability with 3DEXPERIENCE environments
- Excel-based automation workflows for simulation-driven studies and reporting
- New LS Geometry tools for rapid reflector concept creation

Why Upgrade to LucidShape CAA V5 Based 2026?

- ✓ Higher-fidelity source modeling
- ✓ Real-time roadway visualization
- ✓ Improved appearance analysis
- ✓ Expanded regulatory coverage
- ✓ Enhanced optical design workflows
- ✓ Increased automation and productivity
- ✓ Integrated CATIA-based development environment

Faster Design Decisions. Fewer Iterations.

From concept development through regulatory validation, LucidShape CAA V5 Based 2026 enables automotive lighting engineers to design, evaluate, optimize, and validate lighting systems more efficiently. By streamlining critical stages of the development process, the solution helps teams reduce development risk, improve design confidence, and accelerate the delivery of production-ready automotive lighting designs.

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