

| / OPTICS AND VR | SPEOS PRO | SPEOS PREMIUM | SPEOS ENTERPRISE | SPEOS OPTICAL PART DESIGN | SPEOS OPTICAL SENSOR TEST | SPEOS HUD DESIGN AND ANALYSIS | SPEOS FAR INFRARED EXTENSION | SPEOS OPTICAL DESIGN OPTIMIZER | VRXPERIENCE PERCEIVED QUALITY | VRXPERIENCE LIGHT SIMULATION | VRXPERIENCE HMI | | | |
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| ANSYS PRODUCTS EMBEDDED | | | | | | | | | | | | | | |
| Ansys SpaceClaim Direct Modeler | ● | ● | ● | | | | | | | | | | | |
| Ansys SpaceClaim Catia V5 Interface | ● | ● | ● | | | | | | | | | | | |
| Ansys DesignXplorer | ● | ● | ● | | | | | | | | | | | |
| Ansys License Manager | ● | ● | ● | | | | | | | | | | | |
| GENERAL SOLVER CAPABILITIES | | | | | | | | | | | | | | |
| Monte-Carlo Forward Ray Tracing | ● | ● | ● | | | | | | | | | | | |
| Monte-Carlo Backward Ray Tracing | | ● | ● | | | | | | | | | | | |
| Deterministic Simulation | ▲ | ● | ● | | | | | | | | | | | |
| Spectral Propagation | ● | ● | ● | | | | | | | | | | | |
| Dispersion | ● | ● | ● | | | | | | | | | | | |
| Surface Diffusion | ● | ● | ● | | | | | | | | | | | |
| Volumic Diffusion | ● | ● | ● | | | | | | | | | | | |
| Ambiant Material | ● | ● | ● | | | | | | | | | | | |
| SPEOS Live Preview (GPU Acceleration) | | ● ¹¹ | ● ¹¹ | | | | | | | | | | | |
| Virtual BSDF | | | ● ¹⁰ | | | | | | | | | | | |
| PHOTOMETRY / RADIOMETRY | | | | | | | | | | | | | | |
| Intensity | ● | ● | ● | | | | | | | | | | | |
| Illuminance | ● | ● | ● | | | | | | | | | | | |
| 3D Illuminance | ● | ● | ● | | | | | | | | | | | |
| Luminance | ▲ | ● | ● | | | | | | | | | | | |
| 3D Energy Density | | ● | ● | | | | | | | | | | | |
| 360 View - Observer | | ● | ● | | | | | | | | | | | |
| 360 View - Immersive | | ● | ● | | | | | | | | | | | |

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| HUMAN VISION | | | | | | | | | | | | | | |
| Dynamic Adaption | | | ● | | | | | | | | | | | |
| Glare Simulation | | | ● | | | | | | | | | | | |
| HDR10 Screen Support | | | ● | | | | | | | | | | | |
| WAVELENGTH RANGE | | | | | | | | | | | | | | |
| Visible (360nm - 830nm) | ● | ● | ● | | | | | | | | | | | |
| UV (100nm - 360 nm) | | ● | ● | | | | | | | | | | | |
| Near IR (830nm - 2.5um) | | ● | ● | | | | | | | | | | | |
| Far Infra-Red (2.5um - 100um) | | | | | | | ● | | | | | | | |
| OPTICAL DESIGN | | | | | | | | | | | | | | |
| Parabolic Surface | ● ¹² | ● ¹² | ● ¹² | | | | | | | | | | | |
| TIR Lens | ● ¹² | ● ¹² | ● ¹² | | | | | | | | | | | |
| Projection Lens | ● ¹² | ● ¹² | ● ¹² | | | | | | | | | | | |
| Optical Lens | | | | ● | | | | | | | | | | |
| Optical Surface | | | | ● | | | | | | | | | | |
| Light Guide | | | | ● | | | | | | | | | | |
| Sharp Cut-Off Reflector | | | | ● | | | | | | | | | | |
| Poly-Ellipsoidal Surface | | | | ● | | | | | | | | | | |
| Micro Optical Stripes | | | | ● | | | | | | | | | | |
| Freeform Lens | | | | ● ¹¹ | | | | | | | | | | |
| Honeycomb Lens | | | | ● | | | | | | | | | | |
| Field of View | | | | | ● | | | | | | | | | |
| Export Sensor Grid as Geometry | | | | | ● | | | | | | | | | |
| Camera Sensor | | | | | ● | | | | | | | | | |
| Camera Raw Signal Export | | | | | ● | | | | | | | | | |
| Camera Sensor Post Processing | | | | | ● | | | | | | | | | |

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| OPTICAL DESIGN | | | | | | | | | | | | | | |
| SPEOS Lens System Importer (ZEMAX OpticStudio) | | | | | ● | | | | | | | | | |
| LiDAR Sensor | | | | | ● | | | | | | | | | |
| LiDAR Rotating & Scanning | | | | | ● | | | | | | | | | |
| LIDAR Raw Time of Flight generation | | | | | ● | | | | | | | | | |
| HEAD-UP DISPLAY | | | | | | | | | | | | | | |
| HUD Optical Analysis | | | | | | ● | | | | | | | | |
| HUD Optical Design | | | | | | ● | | | | | | | | |
| HUD Visualisation | | | | | | ● | | | | | | | | |
| SOLVER PERFORMANCES | | | | | | | | | | | | | | |
| Default Number of Cores | 4 | 4 | 4 | | | | | | | | | | | |
| Parallel Solving on Local PC | ● | ● | ● | | | | | | | | | | | |
| Parallel Solving on Cluster | ● | ● | ● | | | | | | | | | | | |
| Parallel Solving with Ansys Cloud Launched from Desktop | ● | ● | ● | | | | | | | | | | | |
| Ansys RSM Compatibility | ● | ● | ● | | | | | | | | | | | |
| SIMULATION PREPARATION | | | | | | | | | | | | | | |
| Source Group | ● | ● | ● | | | | | | | | | | | |
| Geometry Group | ● | ● | ● | | | | | | | | | | | |
| Local Meshing | ● | ● | ● | | | | | | | | | | | |
| 3D Textures | | ● | ● | | | | | | | | | | | |
| Polarizer | | ● | ● | | | | | | | | | | | |
| Fluorescent Converter | | ● | ● | | | | | | | | | | | |
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| SIMULATION PREPARATION | | | | | | | | | | | | | | |
| Texture Mapping (Bamp, Multi-Layer) | | ● | ● | | | | | | | | | | | |
| Uniform Ambient Source | ● | ● | ● | | | | | | | | | | | |
| HDRI Source | ● | ● | ● | | | | | | | | | | | |
| CIE Sky Source | | ● | ● | | | | | | | | | | | |
| Natural Light Source | | ● | ● | | | | | | | | | | | |
| Near Infrared Extended Ambient Source | | ● | ● | | | | | | | | | | | |
| Thermic Source | | | | | | | ● | | | | | | | |
| POST PROCESSING | | | | | | | | | | | | | | |
| Virtual Lighting Controller | | ● | ● | | | | | | | | | | | |
| Photometric Numerical Certification | ● | ● | ● | | | | | | | | | | | |
| Colorimetric Analysis | ● | ● | ● | | | | | | | | | | | |
| Spectral Analysis | | ● | ● | | | | | | | | | | | |
| Light Expert | ● | ● | ● | | | | | | | | | | | |
| Layer by Source | | ● | ● | | | | | | | | | | | |
| Layer by Face | | ● | ● | | | | | | | | | | | |
| Layer by Sequence | | ● | ● | | | | | | | | | | | |
| Stray Light Analysis | | ● | ● | | | | | | | | | | | |
| Layer by Polarisation | | ● | ● | | | | | | | | | | | |
| Visibility and Legibility | | | ● | | | | | | | | | | | |
| Night Vision Goggle | | | | | | | ● | | | | | | | |
| Script Automation | ● | ● | ● | | | | | | | | | | | |
| OPTIMIZATION | | | | | | | | | | | | | | |
| Parameters | ● | ● | ● | | | | | | | | | | | |
| Design of Experiment | ● ³ | ● ³ | ● ³ | | | | | | | | | | | |
| Design Optimisation | ● ³ | ● ³ | ● ³ | | | | | ● ¹⁰ | | | | | | |
| Ansys optiSLang Interface (12) | ■ | ■ | ■ | | | | | | | | | | | |

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| SYSTEM SIMULATION | | | | | | | | | | | | | | |
| Virtual Display Prototype | | | | | | | | | | | ● | | | |
| Display software in the Loop (SCADE) | | | | | | | | | | | ● | | | |
| HUD | | | | | | | | | ● | | ● | | | |
| Advanced Lighting Component | | | | | | | | | ● | ● | | | | |
| CONTEXT SIMULATION | | | | | | | | | | | | | | |
| Basic Driving Scenario | | | | | | | | | ▲ | | ▲ | | | |
| Advanced Driving Scenario | | | | | | | | | | | ■ | | | |
| Advanced Vehicle Dynamic | | | | | | | | | | | ■ | | | |
| Environement Creation | | | | | | | | | ● | ▲ | ● | | | |
| Trigger & Animation | | | | | | | | | ● | | ● | | | |
| MiL/SiL Connectivity | | | | | | | | | | | ● | | | |
| Virtual Display & Actuators Interaction | | | | | | | | | | | ● | | | |
| RENDERING ENGINE | | | | | | | | | | | | | | |
| Real-Time Physics-Based Lighting | | | | | | | | | ● | ● | ● | | | |
| Advanced Raytraced Lighting | | | | | | | | | ● | | ● | | | |
| Full Physics GPU Lighting | | | | | | | | | ● | | | | | |
| VR | | | | | | | | | | | | | | |
| HMD | | | | | | | | | ● | | ● | | | |
| CAVE, Powerwall | | | | | | | | | ● | | ● | | | |
| Finger Tracking | | | | | | | | | | | ● | | | |
| SOLVER | | | | | | | | | | | | | | |
| Tolerance Variation Engine | | | | | | | | | ● | | | | | |