VRX

DYNAMIC DRIVING EXPERIENCE

As automotive always becomes safer and more intelligent, the systems developed to protect passengers are more complex. Consequently, it becomes critical that they are immediately understandable for the driver. Every second that both the driver and the car will save is crucial to enhance safety and must be anticipated at the product development level. However, the physical prototypes used in the design process of these systems are costly and can induce critical project development delays. To tackle this challenge, discover the multisensory virtual driving experience by OPTIS:VRX.

VRX is a real-time and interactive driving simulator that lets you create, test and experience your driving equipment in real-world conditions, virtually. Based on compelling physical simulation software and systems, VRX provides a predictive experience for the validation of the performance of your intelligent headlights, your ADAS systems, and your Human-Machine Interface. These unique capabilities enable you to speed up the engineering process at an early stage of development on digital test tracks: drive your future car with realistic traffic conditions, including various weather, incoming vehicles, and pedestrians scenarios, anticipating your vehicle's reaction to any critical situations.

" VRX enables Lucid Motors's engineers to see how the headlight's beam will look on the road and how it interacts with sensors on the car. This allows us to shape and change the beam and make sure it accurately simulates its behavior and characteristics."

Dr. Hans Christoph Eckstein, Senior Technical
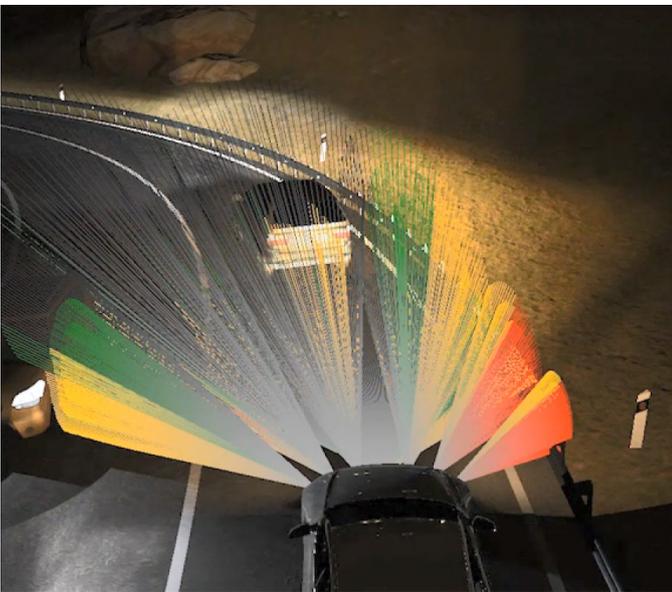Specialist, Optical Engineering | Lucid Motors

INTERACTIVE
HEADLIGHT VALIDATION

To deliver highly qualitative and smart adaptive automotive lighting, benefit from the first virtual lab for testing and validating front headlight systems.

Within seconds, compare different headlight configurations, physically measured or simulated from SPEOS, and quickly review the road illumination and lit appearance of your equipment. It has never been so easy to evaluate the beams in driving conditions and perform regulation checks! Adjust the performance of your headlight accordingly, for the safety of everyone on the road. VRX HL's digital driving experience eliminates the need for real night driving tests. VRX HL helps you ensure that the OEM and Tier 1 philosophy is applied through the whole lighting development process.

ADVANCED
ADAS TESTING

Thoroughly develop and test complex ADAS systems and autonomous vehicles virtually, by connecting optical and functional operations in a single environment with VRX ADAS.

Based on realistic driving conditions, this autonomous vehicle simulator makes the same reliable decisions as the future real-world connected vehicle will. By providing a realistic physics-based sensor response in real time, for camera systems, LiDARs, radars and ultrasonic sensors, VRX gives the digital car all required information about its environment, enabling you to create the safest autopilot systems.

IMMERSIVE
HMI EXPERIENCE

For the first time, discover a reliable and accurate method of testing driver interactions with your future HMI, without endangering lives or damaging expensive equipment.

Mixing sound, vision, and touch, VRX-HMI provides a comprehensive, human-centric, virtual experience. Within an immersive driving environment, efficiently evaluate the driver's responses to new intelligent traffic systems or advanced proactive safety systems, and ensure that he will understand important information instantaneously.

VRX is compatible with any VR headset, sizeable multi-screen display systems, virtual reality systems and can be delivered with optimized steering wheels and car interface controllers to maximize driving substitution.