

MetaOptics Launches

Automatic Metalens Tester to Improve Mass Production Sorting Capabilities



MetaOptics today announced the launch of its new Automatic Metalens Tester, an advanced system developed in collaboration with Elsoft Research Bhd (KLSE:0090.KL), a manufacturer of testing equipment for leading global technology brands.

The tester marks a significant addition to MetaOptics' production process flow as it improves volume manufacturing of next-generation optics.

Purpose-built for MetaOptics' 12-inch glass-based metalens wafers operating in visible wavelengths, the system automates critical testing steps including wavelength and polarization dependent optical efficiency and focus quality. It supports a wide testing range, with a 360° x 120° field-of-view and for working distances from a few centimetres to infinity. Integrated pick-and-place functionality enables precise handling of individual dies from a 12-inch diced wafer. This streamlines the testing, enables binning based on optical performance, and facilitates sorting into different JEDEC trays for good and defective metalenses.



Metalens **Tester**

"Our Automatic Metalens Tester marks a significant step forward in scaling our production capabilities"

said Mark Thng, CEO of MetaOptics Technologies

By combining rigorous performance validation with automated handling and categorization, we are investing in the quality assurance capabilities that customers expect as they prepare for the next generation of optical devices."

The system improves throughput, measurement consistency, and traceability across the manufacturing line — critical factors for supporting high-volume production with the reliability standards demanded by leading global technology brands

Following its debut of breakthrough metalens technologies at CES 2025, MetaOptics remains focused on translating innovation into manufacturable solutions for mobile, augmented reality, and other precision-driven applications.

The Automatic Metalens Tester will be ready for deployment in Q4 2025.

About MetaOptics Inc.

MetaOptics Inc. is a leading-edge semiconductor optics company pioneering glass-based metalens solutions enhanced by Al-driven image processing. Using advanced optical design and a scalable 12-inch DUV lithography process, it powers next-generation applications in mobile, AR VR, automotive and other emerging markets. Headquartered in Singapore, MetaOptics aims to deliver high-performance optics with the reliability and scalability demanded by today's most innovative technology brands.

About Elsoft Research Bhd

Elsoft Research Bhd (KLSE:0090), a company based in Penang, Malaysia, specializes in the design and manufacture of high-precision automated test and measurement solutions. It supports some of the world's leading consumer electronics and semiconductor companies, with proven expertise in high-throughput testing platforms that help clients meet stringent quality and performance standards at scale.