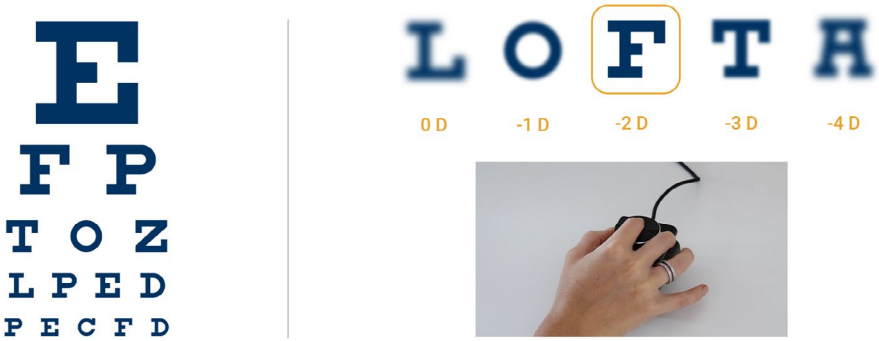
ZEISS to license CREAL's technology to create a digital vision care platform

In an industry first, CREAL will integrate its light field display technology into Zeiss' vision care devices, greatly simplifying vision tests, and thereby enhancing the patient and eye-care practitioner user experience.

10 September 2024 – Lausanne, Switzerland / Aalen, Germany – CREAL today announces a license agreement with ZEISS with the aim to create a digitized vision care platform that hopes to revolutionize the current vision diagnostic and treatment procedures. By leveraging CREAL's light field display technology, ZEISS will bring to market devices that allow for the digital examination of eye conditions as well as virtual simulation of classic ophthalmic lenses, contact lenses, and the like. Ultimately, the partnership should help bring century-old vision test procedures into the 21st century, finally enabling fast, cost-effective and above all user-friendly diagnostic procedures.

Many of today's refraction tests are time-consuming, costly and can even seem intimidating. Manual and lens-based, they rely on outdated technology. As well as all eye care practitioners, these constraints affect a great part of the population. For instance, more than two-thirds of the population in the US wear glasses or contacts[1], while myopia is constantly growing and is expected to affect 50% of the global population by 2050[2]. The need for intuitive, accurate, effective, and cost-efficient vision tests and diagnosis is therefore only to become even more crucial.

Through the integration of CREAL's light field display into vision test devices, ZEISS expects to introduce a groundbreaking solution allowing for precise digital diagnosis of eye defects. By replicating real-world light to provide digital imagery with genuine depth, CREAL's true 3D display will enable the digital replication of any physical or theoretical lens, allow test procedures to be tailored to any age group/customer segment, as well as enable the projection of automated content, limiting the need for clinical resources overall.



Current refraction method vs. digitized refraction method

"As the pioneer of scientific optics, ZEISS' mission has always been to challenge the limits of human imagination," says Antia Alonso Ph.D., Vice President of Zeiss Vision Technology Solutions. "We see our collaboration with CREAL and the consequent development and rollout of our digitized vision care platform as a way to revolutionize the prescription eyewear customer buying experience, elements of which still rely on antiquated technology, developed over a century ago."

Looking ahead, the synergy between ZEISS' expertise in vision care and eyewear, and CREAL's cutting-edge advancements in display technology could help accelerate the development of vision-health and vision enhancement enterprise in all its forms, both real and virtual.

[1] "The Consumer inSights Q1 2002 report", The Vision Council's

[2] Padmaja Sankaridurg, et al, "Impact of Myopia," ARVO Journals, Investigative Ophthalmology & Visual Science, Vol.62, 2, April 2021

About CREAL
CREAL is a display technology startup based in Switzerland, with a technical team drawn from cutting-edge projects at Intel, Magic Leap, EPFL and CERN. CREAL has developed a patented light field micro-display technology stack, uniquely projecting images with true-to-life depth. While serving vision care applications, CREAL naturally expands its mission toward Augmented Reality hardware. With the same business model and partners among the market leaders in the vision care/eyewear industry, CREAL ultimately enables a much-needed natural and healthy visual experience of digital content. To know more, please visit www.creal.com.
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About ZEISS
ZEISS is an internationally leading technology enterprise operating in the fields of optics and optoelectronics. In the previous fiscal year, the ZEISS Group generated annual revenue totaling 10 billion euros in its four segments Semiconductor Manufacturing Technology, Industrial Quality & Research, Medical Technology and Consumer Markets (status: 30 September 2023).

For its customers, ZEISS develops, produces and distributes highly innovative solutions for industrial metrology and quality assurance, microscopy solutions for the life sciences and materials research, and medical technology solutions for diagnostics and treatment in ophthalmology and microsurgery. The name ZEISS is also synonymous with the world's leading lithography optics, which are used by the chip industry to manufacture semiconductor components. There is global demand for trendsetting ZEISS brand products such as eyeglass lenses, camera lenses and binoculars.

With a portfolio aligned with future growth areas like digitalization, healthcare and Smart Production and a strong brand, ZEISS is shaping the future of technology and constantly advancing the world of optics and related fields with its solutions. The company's significant, sustainable investments in research and development lay the foundation for the success and continued expansion of ZEISS' technology and market leadership. ZEISS invests 15 percent of its revenue in research and development – this high level of expenditure has a long tradition at ZEISS and is also an investment in the future.

With over 44,000 employees, ZEISS is active globally in around 50 countries with more than 60 sales and service locations, 35 research and development facilities, and 35 production facilities worldwide (status: 31 March 2024). Founded in 1846 in Jena, the company is headquartered in Oberkochen, Germany. The Carl Zeiss Foundation, one of the largest foundations in Germany committed to the promotion of science, is the sole owner of the holding company, Carl Zeiss AG.
Further information at www.zeiss.com

ZEISS Vision Care
ZEISS Vision Care is one of the world's leading manufacturers of eyeglass lenses and ophthalmic instruments. The unit is allocated to the Consumer Markets segment and develops and produces offerings for the entire eyeglass value chain that are distributed globally under the ZEISS brand.