EssilorLuxottica

Varilux® XR series™ – Best overall progressive lens

Which characteristics of the products are relevant to compare?

- A consumer quantitative research was conducted by a renowned external institute, early 2022 among n=4062 representative sample of progressive lens wearers in 5 main countries (Brazil, France, US, UK, Italy) to quantify progressive lenses key aspects' relative importance for consumers. These aspects have been previously defined by Essilorluxottica thanks to its expertise in progressive lenses evaluations and thanks to a qualitative survey (24 progressive lens wearers)- As the leading category expert in progressive lenses evaluation, EssilorLuxottica has been constantly studying and evaluating wearers' needs, physiology and behavior to further improve wearers vision and satisfaction thanks to LiveOptics™ process.

- The list of 14 aspects established as important for premium progressive lenses covers the following topics: sharpness & fields of vision at different distances, transitions between the different vision zones, dynamic vision & distorsions, postural behavior, vision in low light conditions.

Which specific products of which competitors were compared ?

- EssilorLuxottica also conducted research on which specific products of which competitors should be taken into account to make a fair comparison.

- In this respect, EssilorLuxottica relied on two main surveys conducted recently in 2022 by independent third parties: Global Consumer Lens Brand Tracking - Q3 2022 - BR CA CN FR IN IT UK US (n=8000 progressive lens wearers) and Global ECP Lens Brand Tracking - 2022 - BR CA CN FR IN IT UK US (n=2006 eyecare professionals). The panels are representative of the general population.

- Thanks to these surveys a list of brands with the highest levels of awareness among consumers and with the highest levels of recommendation among eyecare professionals was defined. Based on this list, EssilorLuxottica could make a well-founded and accurate decision. For each of these brands, EssilorLuxottica compiled their declared best progressive lenses products, i.e. their current premium products. These were identified thanks to publicly available information (websites, brochures).

Objective and similar testing conditions

- EssilorLuxottica further made sure to cover a wide range of lens prescriptions so as to account for differences in users and be representative for the general population. All the tested progressive lenses products were all store-quality as they were all manufactured, and faithfully reproduce the consumer experience when buying a new lens. Throughout the performance testing, the environment, software and hardware used to achieve, the results were the same for all lenses tested.

Advanced simulation software used by EssilorLuxottica R&D department

- The comparison study between the selected products and Varilux® lenses, was performed by EssilorLuxottica R&D department using an advanced digital simulation tool, that can simulate the performance of a lens for a wearer based on the lens design and the wearer characteristics.

- The advanced digital simulation tool is developed by EssilorLuxottica as an in-house tool for innovation and for testing the quality of its own products. It is tried and tested as a fact-finding tool since 2017. In the scope of the LiveOptics™ process, the advanced digital simulation tool is used to test the performance of lenses prior to real-life comparative studies. The advanced digital simulation tool is developed on the basis of established principles in the field of optometry and software models commonly used in this field of research but also applies new technics which further enlarge its accuracy in relation to representing human experience.

Outcome of simulations

- The assessment was done by taking into account the relative importance of each criterion as established during the quantitative study. The performance results have been confirmed as statistically significant by an independent third party specialized in statistical modeling who performed statistical meaningfulness control.