

# EYEZEN™ NON-PRESCRIPTION READY MADE GLASSES: WHAT ARE THE PERCEIVED BENEFITS FOR EMMETROPES?

The new category of Eyezen™ ophthalmic lenses for connected life is targeted at all digital device users. Eyezen™ lenses have been tested by independent market research institutes and assessed by future ametropic and emmetropic users. Based on an extremely positive response from wearers of single-vision prescription lenses,<sup>1</sup> Essilor asked the independent market research institute Audirep (France) to organize a wearer test for people who do not wear eyeglasses. This article discusses the results of this latest test and outlines the perceived benefits for emmetropic wearers of Eyezen™ non-prescription eyeglasses. The author assesses the level of satisfaction, the speed at which wearers get used to them, and the reduction in screen-generated eye strain and glare.



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Mr. Plissonneau helps customers implement customized, innovative methodological protocols in France and abroad. He applies his expertise to a complete range of product test issues (wearer tests, pre- and post-test product launches, product satisfaction surveys, and so on), particularly in the ophthalmic optics sector.



#### KEYWORDS

Eye strain, headaches, ocular discomfort, blurred vision, digital devices, screens, visual comfort, brightness, small fonts, near vision, Eyezen™, Essilor.

Developments in digital technology have led to an explosion in the use of tablets, smartphones, video games and other devices. Digital devices and their use cause changes to eye behavior as a result of increasing screen exposure.

It is clear that reading distances are variable and reduced when using smartphones and reading smaller-sized fonts. Eyes are exposed to the brightness of our screens for longer. These changes cause eye strain and, over time, expose us to the potentially harmful effects of Blue-Violet light.

As a result, three-quarters of people suffer eye strain,<sup>2</sup> and young people are likely to be the worst affected as they gradually swap the television for other digital screens.

#### Purpose of the study

In response, Essilor has developed a new category of lenses adapted to connected life: Eyezen™.

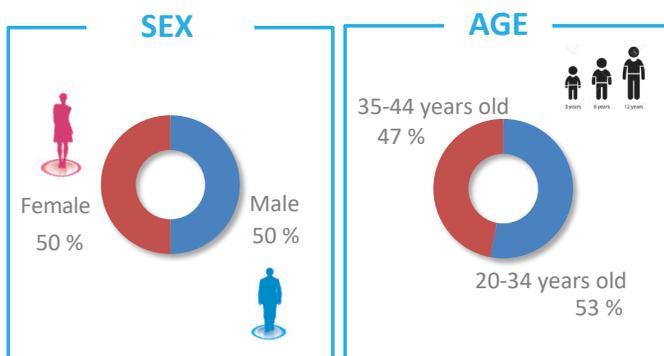
Eyezen™ relieves eye strain and helps protect wearers' visual health. It features a new technology, Eyezen™ Focus, which offers extra power in the lower zone of the lens. This power is adapted to the wearer's specific characteristics supporting the accommodative function of the wearer's eyes, enabling users to adapt to the new uses demanded by mobile devices.

New Eyezen™ lenses are not targeted at ametropic wearers alone; they are also suitable for emmetropic users aged 20 to 45 who use near vision for screen activities. Lenses for emmetropic users would be available in ready made non-prescription eyeglasses, that means with standard parameters, non-customized and without taking the patient's measurements.

Before launching this offer, Essilor called on the services of independent market research institute Audirep. The aim was to conduct a wearer test survey of emmetropic users to measure the performance of these lenses directly on users and to assess their level of satisfaction. More specifically, we wanted to know how quickly they got used to these lenses and to determine their impact on eye strain when using digital devices.

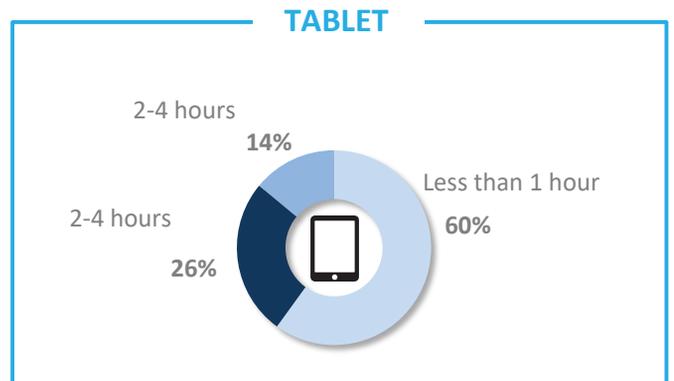
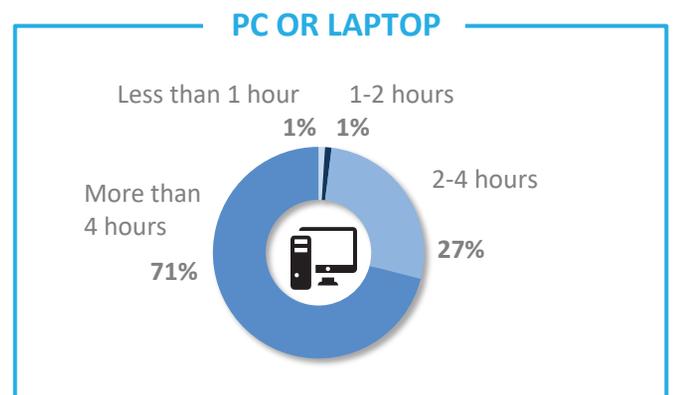
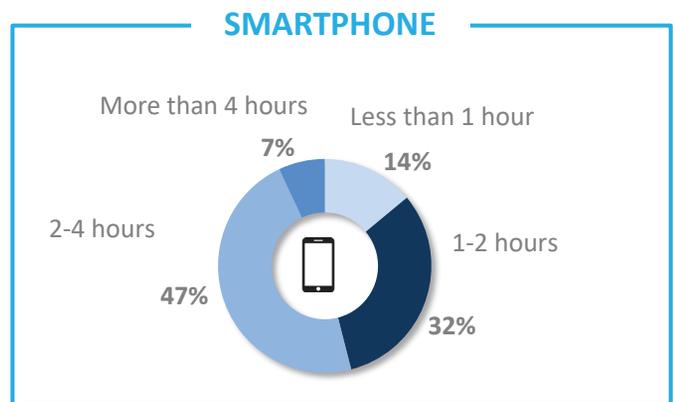
**Population**

The survey focused on a sample of 96 emmetropic individuals, men and women without eyesight correction, aged 20 to 44.



The survey was conducted in France on ultra-connected wearers who use various digital devices intensively and simultaneously.

The wearers were selected because they displayed the symptoms of eye strain after using digital devices, including ocular discomfort (88%), blurred vision (47%) and headaches (39%).



**Equipment tested**

The equipment tested corresponds to non-prescription eyeglasses with Eyezen™ 0.4 (plano lens for far vision and 0.4 D of additional power for near vision, in polycarbonate) associated with Crizal® Prevensia® treatment.

The participants did not have a choice of frames: there was one model for men and another for women.

Men's model



Women's model



No measurements were taken and standard parameters were applied. A pupillary distance of 32.5 mm was applied for men and 30.5 mm for women. Height mounting was performed according to the B/2 rule at Boxing mid-height by referring to the micro-circles line.

**Test protocol**

The survey was based on a blind test. Wearers were not aware of the benefits of the lenses or the name of the manufacturer to avoid introducing bias into their perception of the tested equipment.

The equipment was sent to the wearer's home in a case with a cleaning cloth and instructions for use.

Once they had received the equipment, each wearer was contacted to complete a questionnaire in order to gauge their first impressions of the equipment in relation to the aesthetic aspect of the lenses and frame. They were asked to wear the equipment for at least four hours per day, mainly when using digital devices. After wearing the equipment for three weeks, each wearer answered a second questionnaire to establish their level of satisfaction in terms of visual comfort and perceived benefits, especially when using digital devices.

**Outcome:**

The results were consolidated over the complete sample, a total of 96 wearers.

At the end of the three-week wearing period, 88% of emmetropic users said they were satisfied with the equipment – a very high level of satisfaction for this specific Eyezen™ offer. (Fig.1)

Several factors explain the high level of satisfaction with Eyezen™:

1. **Excellent level of adaptation** (a key satisfaction criterion for wearers, especially since the sample comprised emmetropic individuals who do not wear corrective eyeglasses and no measurements were taken). 96% of participants got used to their new equipment; 90% found it easy and 85% fast. (Fig. 2)



*It takes a while to get used to them at first. But you get used to the slight magnifying effect and the change in display color (less white, more yellow) very quickly.*

*You get used to the glasses very quickly and you don't even think about them after a while. Sometimes I didn't take them off when I wasn't looking at the screen and I didn't even realize it.*

2. **Reduced eye strain** caused by intensive use of digital devices was also noted at the end of the study. In fact, 82% of wearers did not suffer or suffered less from eye strain after wearing Eyezen™.



*It's restful for your eyes. I don't get as many headaches and my eyes are less tired when I'm working on the computer.*

*It has a big impact on eye strain and reduces ophthalmic migraines.*

3. Recognized effectiveness when reading or working on screens, with a marked improvement in visual comfort satisfaction levels with Eyezen™. Before wearing Eyezen™, 23% of wearers said they were completely or very satisfied with their visual comfort compared with 71% after the test. 73% said their visual comfort was improved by Eyezen™ when using screens. (Fig. 3)



FIG.1|

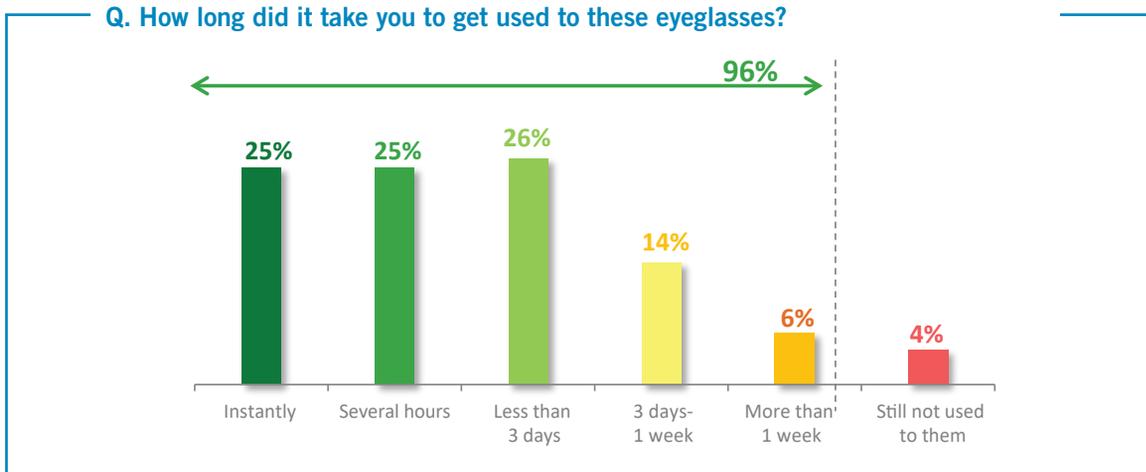


FIG.2|

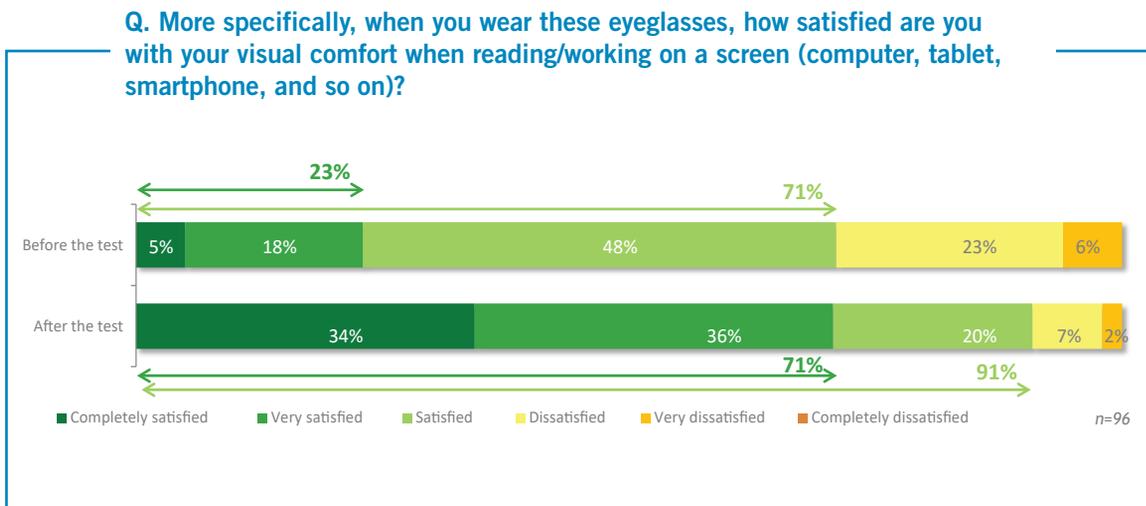


FIG.3|

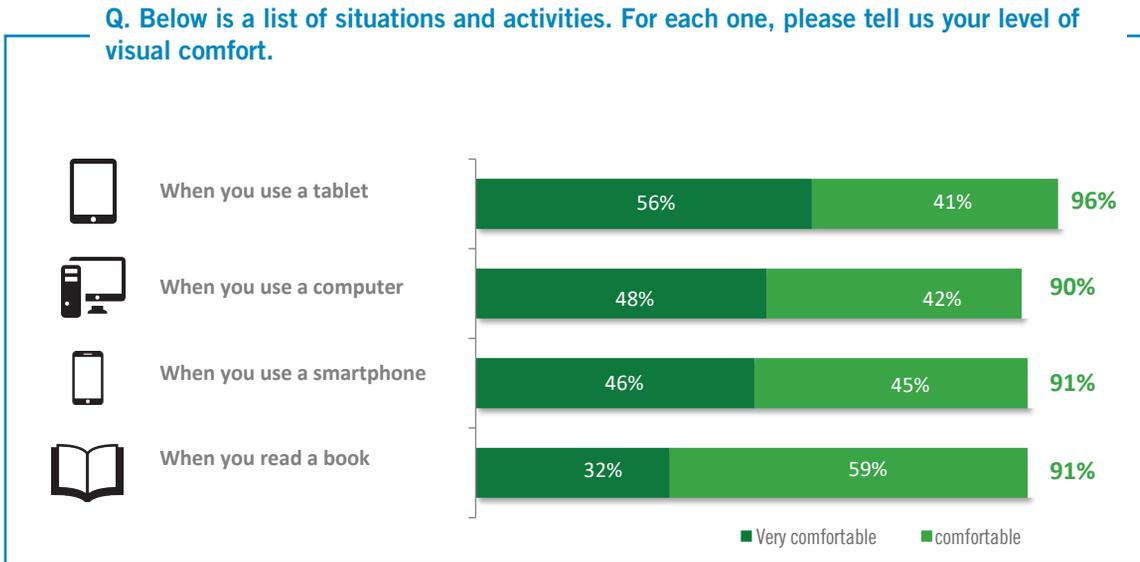


FIG.4|

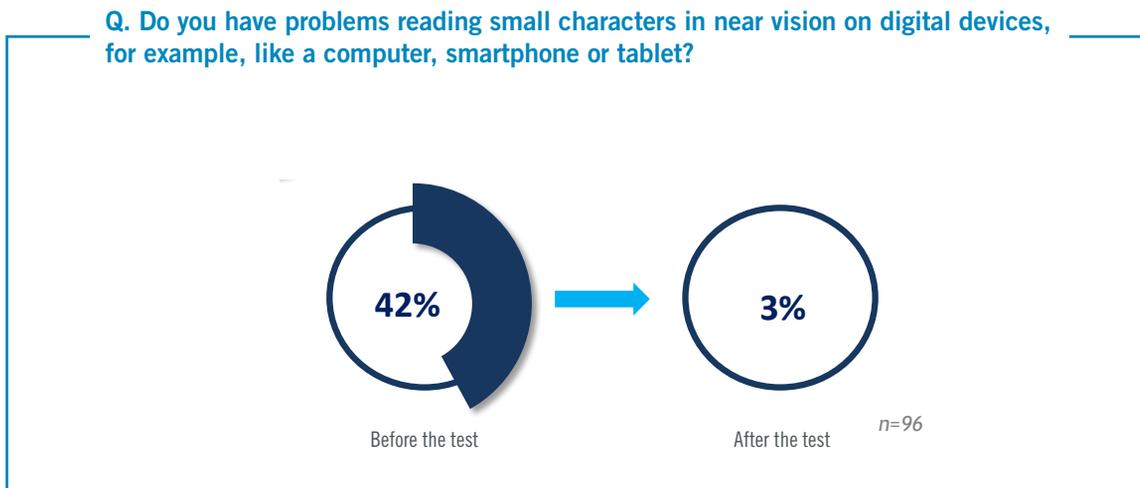


FIG.5|

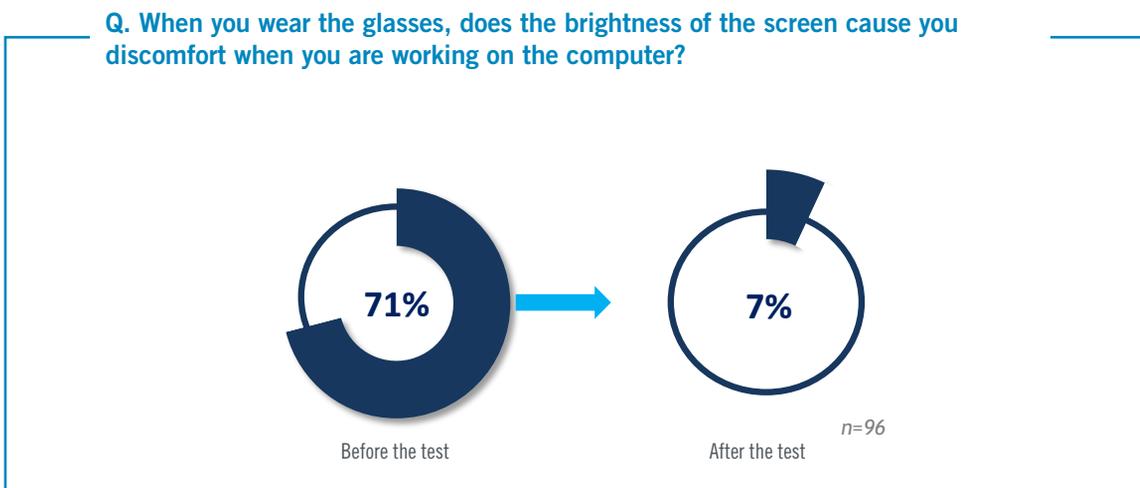


FIG.6|



*They're not bad. They reduce the brightness of the screen and relieve your eyes.*

*Very comfortable to use. They're very restful when you work with a screen every day.*

*The lenses are visually very comfortable, and the treatment makes it much more comfortable to work on the computer. They're really pleasant to wear.*

*They filter the light and screen glare very well and really soothe the eyes when you spend a lot of time in front of a screen.*

4. Visual comfort widely recognized for near vision, either when using digital devices (tablet, computer or smartphone) or reading. (Fig. 4)

In addition, the survey measured perceived benefits when reading small characters and in relation to discomfort caused by display brightness.

Before the test, 42% of wearers said they found it difficult to read small characters on screens, dropping sharply to 3% after the test. (Fig. 5) In addition, 95% said their ability to read small fonts improved after wearing Eyezen™.

It also had a positive impact on screen brightness. Before the test, nearly three-quarters of participants said screen brightness caused them discomfort, compared with just 7% after wearing Eyezen™ (Fig. 6)



*The lenses reduce screen glare.*

*They enhance comfort, particularly for people who spend a lot of time in front of a screen. Screen glare is less aggravating when wearing the eyeglasses.*

*It is very restful for the eyes. It eliminates itchiness and computer-screen glare.*

**Conclusion:**

The excellent results of the survey provide a solid basis for the launch of non-prescription Eyezen™ eyeglasses with Crizal® Previncia® for emmetropic users.

The excellent global indicators are substantiated by the proven, recognized effectiveness of the equipment. In addition to a high level of satisfaction with the equipment, most wearers who tested the lenses plan to continue wearing the equipment after the study (88%) and would recommend it to relatives (85%).

The highly positive outcome after three weeks of wearing the equipment is substantiated by reduced eye strain, much lower levels of discomfort caused by display brightness when working on digital devices, and higher visual comfort as a result. In addition, wearers found it quick and easy to get used to the equipment, encouraging them to wear it regularly. The study revealed that non-prescription eyeglasses with Eyezen™ lenses provide real benefits and appear to be a solution for all screen users, even people who do not wear eyeglasses. •



**KEY INFORMATION**

- Eyezen™ (with Crizal® Previncia®) non-prescription eyeglasses have been tested by people who do not wear eyeglasses and gave complete satisfaction.
- The wearers recognized the benefits of these lenses for eye strain after spending time in front of digital screens.
- The study also revealed the effectiveness of these lenses when using digital devices, providing greater visual comfort compared to before the test.
- The equipment also had perceived benefits in terms of display glare – significantly reduced by Eyezen™ – and the legibility of small characters on screens, judged to be more comfortable.
- Lastly, this specific equipment is perfectly adapted to ultra-connected wearers who use various digital devices a lot.

**REFERENCES**

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