

Avulux vs. FL-41

What ECPs Need To Know

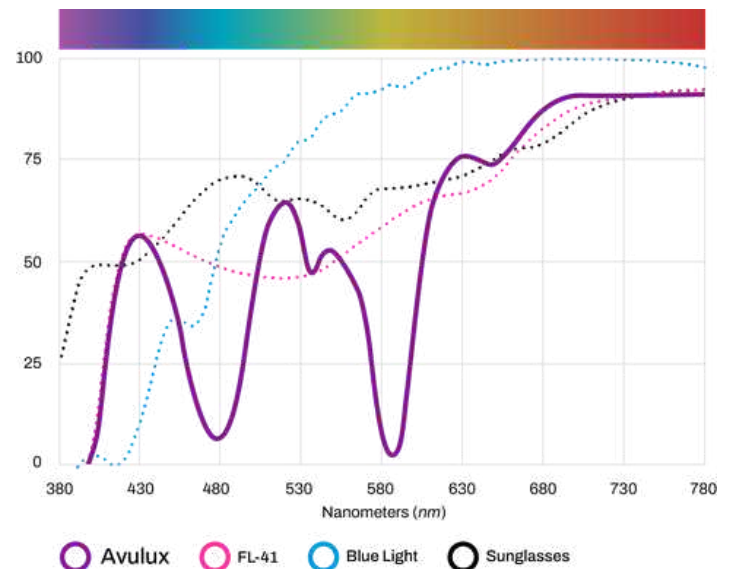
Many ECPs have heard of FL-41 – a generic tint formulation that has been used by lens manufacturers since the early 1990s – developed for patients with an aversion to the flickering of fluorescent lights used in that era.

While FL-41 might have been commonly used in the past, Avulux represents an evolution in precision light filtering technology that offers superior and consistent light filtration for patients living with migraine and light sensitivity. But, is Avulux really a better alternative to FL-41? Yes, and we've answered some commonly asked questions to help clarify matters:

What is the primary difference between Avulux and FL-41?

A 2010 study showed that intrinsically photosensitive retinal ganglion cells (ipRGCs) at the back of the retina can release melanopsin when activated by certain wavelengths of light in the 480nm (blue) to 590nm (amber) range. The study found that the exacerbation of migraine related headaches by light can involve both extrinsic photoactivation of ipRGCs by rods and cones, as well as intrinsic photoactivation of melanopsin. Additionally, a 2016 Harvard study showed that a narrow band of green light reduced headache pain intensity, and green light can soothe it.

While FL-41 blocks a portion of blue light, Avulux blocks up to 97% of blue, amber and red lightwaves, BUT also allows up to 70% of soothing green light through.



In 2020, a double-masked, randomized, placebo-controlled study was conducted by an independent clinical research organization to compare the benefits of wearing Avulux lenses versus clear placebo lenses on subjects with episodic migraine.

Why should prescribing a clinically proven lens matter to ECPs?

Offering a clinically proven lens means that ECPs can prescribe with confidence and the knowledge that the development of the lens is backed by science and not merely anecdotal evidence.

How else is Avulux a better choice for patients?

Avulux is patented and is manufactured exclusively in the U.S. using stringent manufacturing standards to consistently deliver high-quality and effective, single vision, progressive and PolyFlex lenses. FL-41 is a

commodity formulation with manufacturers across the globe using varying formulations and manufacturing standards.

The results show that, if applied within the first hour after the onset of a migraine attack, and if no abortive medications were taken, that Avulux was both statistically and clinically superior to the placebo lens. This is the highest scientific standard of efficacy.

Does Avulux offer additional benefits to patients?

FL-41 casts a “rose” hue when looking through the lenses.

While this does not impact the light filtration properties of the FL-41 lens, it does mean that glasses with this lens are more conspicuous, and patients are seeing their world through this view.

Features	Avulux	FL-41
Precision Optical Filter	Multi-Band	Single-Band
Neutral Color Rendering (does not distort how you perceive color)	✓	✗
Filters up to 85% of harmful blue light	✓	Some Lenses
Filters up to 97% of harmful amber & red light	✓	✗
Allows in over 70% of soothing green light while filtering harmful light	✓	✗
Patented	✓	Some Lenses
Through an independent clinical trial: Achieved clinical and statistical significance when compared to placebo with a population of subjects with episodic migraine	✓	✗
Effective light management indoors or outdoors with the same lenses	✓	✗