
Cocoons are offered in a variety of polarized lens tints. Each tint has been formulated to provide a unique result. Choosing which one is best for you has a lot to do with your personal preference, ambient light conditions and the activities you intend to use your Cocoons for. This article will help explain the differences in lens properties and will provide you with a sound understanding of the specific benefits provided by each Polaré lens option. Hopefully it will help you in selecting a lens tint that best suits your lifestyle.

OveRx Sunglasses – Choosing a Polaré Tint

Before explaining the unique properties offered by each lens tint, I will provide an overview of the benefits delivered by polarized Polaré® lenses in general. This will give you basic knowledge of the lens characteristics and will enable you to better understand the unique specifications of each lens.

The common optical industry term for lenses that block all harmful ultra-violet rays is “UV400”. Harmful UV rays are the wavelengths of light in the visible spectrum that are less than 400 nanometers. Long term exposure to these rays can cause sunburn, skin cancer and a host of eye ailments. Each of the four polarized Polaré tints (Gray, Amber, Copper and Yellow) provides UV400 protection.

Polarized lenses provide the unique benefit of reducing or eliminating blinding glare that is created when light is reflected off of a horizontal surface. Glare happens when different amounts of light hit your eyes from varying angles. Polarization is a process that involves inserting a sheet of polarizing film between the layers of a lens. You could think of polarization as chemical Venetian blinds, as it works on almost the same principal. The polarizing film changes the angle that light is coming to your eye, lining it up so to speak, in a uniformed condition. By doing this, glare is usually completely eliminated. The glare we encounter on a daily basis can be generated from any reflective surface, including sand, water or concrete. Glare is not harmful in itself; however it can contribute to a sense of irritation, and greatly reduces visibility. This can lead to blind spots when driving, boating or participating in other activities that require maximum visual acuity at all times. Many sunglasses are not polarized because the lenses cost a considerable amount more to make than standard tinted lenses. Many fashion sunglasses that retail for hundreds of dollars are not polarized. Wearing a polarized sunglass is highly recommended since they both block harmful UV rays, and reduce or completely eliminate glare, allowing your eyes to remain relaxed and focused.

Most lenses will have a label on them identifying the product as polarized, however there is an easy test to verify if a lens is polarized or not. Simply take two pairs of sunglasses (one pair must be polarized) and hold the polarized pair at eye level so that you can see through it. A bright room or daylight is best. Then hold the second pair you wish to check in front of the polarized pair (on the same horizontal plane) and look through both lenses at the same time. Once you have lined both pairs up so that you are looking through both the first and second set of lenses, rotate the pair you are checking 90 degrees. If there is a polarizer in the lens, you will completely black out the lenses and won't be able to see through them at all. If the lenses aren't polarized you will still be able to see through them. In some cases, the lenses get a lot darker but you can still see partially through them. This means that the polarization efficiency of the lens being tested is less than 100%. Many sunglass companies, who claim that their lenses are polarized, do not tell you that the lens is only 70% polarized, or in some cases as low as 30% polarized. As the tint of a lens gets lighter, especially with yellows and light amber lenses, polarization is harder to accomplish. All Polaré polarized lenses have a 100% efficiency rating... even our yellow tint. This provides the Polaré yellow with a significant performance advantage as most yellow tints have very low polarization efficiency or are not polarized at all.

The light transmission (often abbreviated as LT) of a lens refers to the percentage of light that is transmitted through the lens. In general, the darker the lens is, the lower the LT rating will be. For example, a medium gray lens might have an LT of 17%, meaning 83% of light does not penetrate the lens. A clear lens would have a transmission of 100%, as it is not filtering out any light. A yellow lens may have a 30% LT; meaning 70% of the available light is not transmitted to the eye. The tint of a lens is the only method of adjusting how much light gets to the eyes. The lower the transmission percentage, the darker the lens usually is. It is not advisable to wear low transmission lenses in low light conditions. Lenses that are popular for early morning or evening usually are brighter yellows and high contrast ambers. These lenses allow more light to penetrate the lens, enabling you to see more clearly under low light conditions.

Gray is the most popular and commonly used sunglass tint in the world. The reason for this is a gray tint will deliver natural color definition. There are many shades of gray, but all will deliver colors to the eye without any alteration whatsoever. Gray is considered a general purpose lens, and is popular in almost every application. Typically, you can't go wrong with a gray lens. However, it does lack the specialty functions some of the other tints deliver. Polaré Gray lens has a 15% LT.

Amber is a blue blocking tint that causes some color distortion, but has the benefit of enhancing contrast because it reduces scattered blue light that can cause objects to seem “flat” against backgrounds in varying light conditions. The results are improved depth perception and object definition. Amber is extremely popular for use on or near the water, especially by fishermen. By utilizing a contrast enhancing polarized lens, they can cut through the extreme glare present on the water's surface and identify fish and underwater obstructions much more effectively. Polaré Amber has a 14% LT.

Copper is a very “warm” tint. It delivers truer color definition than Amber but still increases contrast significantly. The copper lens tends to make oranges, browns and reddish colors stronger. Copper is popular on the water or for everyday use. It is the preferred tint when choosing a driving lens. Polaré Copper has a 16% LT.

Yellow is a unique lens that is very effective in low ambient light conditions. With 27% LT, it transmits the most light of any of our polarized tints. It is not a good general purpose tint because it can be too intense when worn in bright light, but it is an extremely popular lens when worn in conditions where the level of visible light is greatly reduced, such as dusk and dawn. The lens' unique “highlighting” effect makes objects “light up”, greatly improving visual acuity in low light. Yellow should not be used in bright conditions unless prescribed by a low vision specialist.

Live Eyewear also offers four special non-polarized tints for helping people with [specific vision ailments](#).