

Tinting Fact Sheet

The effects of applying AR coatings to tinted lenses often generates difficulties and this fact sheet tries to explain some of the issues. Many variables can have a bearing on the final intensity of the tint, including: the lens material, existing hard coats and dyes along with the cleaning and AR coating.

Furthermore, our cleaning processes normally result in an increase of the Light Transmission Factor (LTF) of the finished lens of between 5% to 20%. We can more accurately (+/-5%) meet your customers' needs when we apply both the tint and the antireflection coating. In the event of your sending lenses to us for AR coating which have already been tinted, please would you specify the finished LTF% which you require.

As there are many different conventions for describing tints, below are the generally accepted standard parameters which we apply at Optimum Coatings for brown or grey colours.

| Grade | | Absorption | Transmission (LTF%) | Shade |
|-------|---|---------------|---------------------|-----------|
| 1 | A | 20% | 80% | Pale |
| 2 | B | 30% | 70% | Light |
| 3 | C | 50% | 50% | Medium |
| 4 | D | 75% | 25% | Dark |
| 5 | E | More than 80% | Less than 20% | Very Dark |

Fashion colours are also available, as well as UV block for plastic lenses. We must point out that certain fashion colours may have tint depth restrictions resulting in limited LTF.

Custom tints can be applied by requesting a finished LTF or by sending us a finished sample lens to match whereby the closest possible match will be achieved.

Optimum can supply and tint all high index materials to 25% LTF approx.

Tinting of high index materials is a complex process and it is advised that if you are sending in your own lens for us to apply a tint, you should check with the material supplier that the material can be tinted and not just the hard coat. Some high index materials may have tinting restrictions.