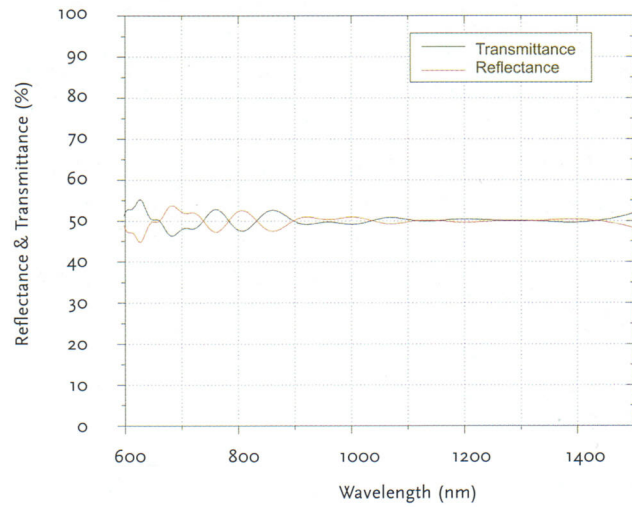
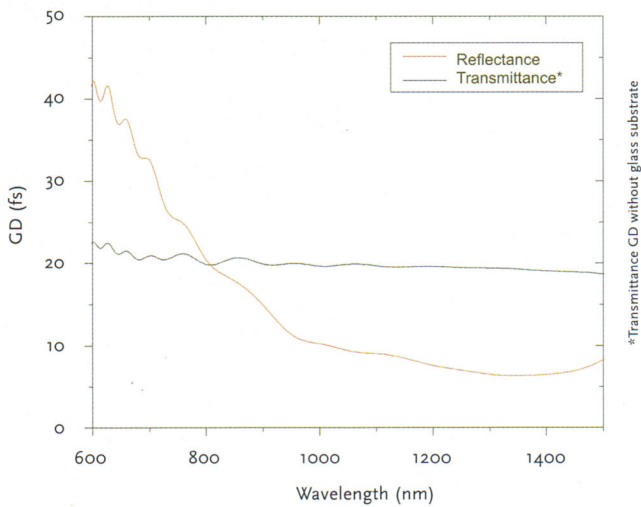


## The NANEO Mirror Technology

- Besides our most featured product, the VENTEON | PULSE : ONE laser oscillator family, we offer a wide range of high-quality optics with most demanding specifications and highest damage thresholds. Either custom design or in-house design - we can grow dielectric layer stacks you will hardly find anywhere else. The effective thickness precision is about 0.5 nm



- Ultra broad Beam Splitters with Balanced Dispersion**  
Femtosecond laser pulses with spectral content approaching one octave and beyond require specialized optical components to avoid the accumulation of phase distortions that can not be precompensated for. Especially in femtosecond measurement equipment and setups an important component is a broadband beamsplitter. Most often metallic beam splitters are used which introduce, however, high losses and undesired wavelength dependence. We have developed all-dielectric ultra broadband beam splitters with constant splitting ratio and balanced dispersion in transmission and reflection. The figures above show the reflectance, transmission and group delay of a lossless beam splitter with 50% +/- 5% splitting ratio and identical group delay for transmission and reflection in each direction. The shown example covers the wavelength range from 600 nm to 1500 nm. The dispersion in reflection upon the dielectric coating is designed to be identical to 0.7 mm of fused silica in a way that the dispersion in transmission is the same as in reflection.

- Ultra broad GVD Mirrors** The VENTEON femtosecond laser technology is based on ultra broadband dispersion compensating mirrors covering one octave in bandwidth.

The figures below shows the reflectance, transmission, and average group delay of those mirrors.

