## Wasatch Photonics

## 1500 l/mm @ 840 nm <br> VPH transmission grating for OCT



## PERFORMANCE BENEFITS

Excellent $1^{\text {st }}$ order diffraction efficiency for greater sensitivity and faster scan rates

Superior uniformity over the full spectral band for better SNR and axial resolution

Minimal polarization sensitivity across wavelength
Low wavefront error to reduce roll-off
Robust, durable optic for easy cleaning \& handling
Enables compact, transmissive optical designs

## Maximize your sensitivity and scan speed with our patented grating designs

The clearest, deepest spectral domain optical coherence tomography (SD-OCT) images require an optical design that covers a broad bandwidth with maximum signal to noise ratio (SNR). That's why we developed our OCT gratings to have high efficiency and low polarization dependence across the full operating wavelength range. Choose from our range of stock gratings, or draw on our expertise in OCT to design your ideal grating. Place our VPH gratings at the heart of your OCT spectrometer or system and achieve clearer images, faster.

## VPH Grating: HD 1500 l/mm @ 840 nm

## STANDARD PRODUCT SPECIFICATIONS \& OPTIONS

Standard sizes and specifications for this grating are shown below. Don't see what you need? Let our expert staff design and build a custom grating to meet the needs of your specific application and optical design.

|  | WP-HD1500/840-35x45 |
| :---: | :---: |
| Center Wavelength (CWL) | 1050 nm |
| Spatial Frequency (lines/mm) | $600 \mathrm{l} / \mathrm{mm}+/-0.5 \mathrm{l} / \mathrm{mm}$ |
| Operating Range | 740-940nm |
| Angle of Incidence ( $\theta_{i}$ ) | $39.1^{\circ}$ @ 840 nm |
| AR coating | < 0.5\% reflection, 950-1150 nm |
| Surface Quality | 60-40 scratch-dig |
| Diffracted Wavefront Error | < $\lambda / 5$ rms @ 633 nm over 1" Ø |
| Substrate | BK7 |
| Chamfers | 0.25-0.75 face width |
| Size | $35 \times 45 \mathrm{~mm}$ |
| Size Tolerance | +0/-0.15 mm |
| Thickness | $6 \pm 0.25 \mathrm{~mm}$ |
| Clear Aperture | $30 \times 40 \mathrm{~mm}$ |



## Customization available upon request

