

Photopolymeric Volume Phase Holographic Gratings for the Nordic Optical Telescope

In this document are reported the experimental measurements of the VPHGs produced for the NOT and indicated with the name BLUENOT, GREENNOT, REDNOT.

The following table contains the specifications of each GRISM

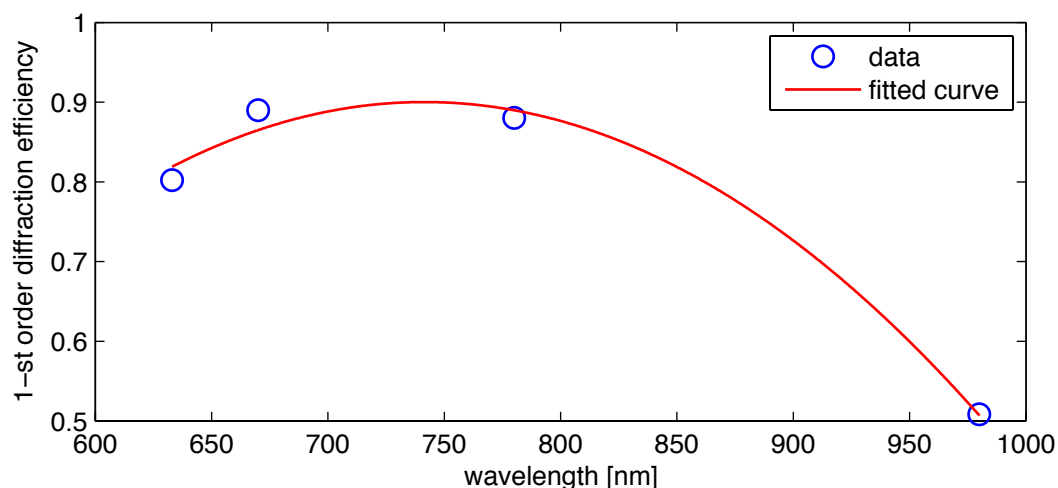
	Central [nm]	Range [nm]	Dispersion [Å/px]	Resolution	apex angle A [°]	spectral length [mm]	lines/mm
BLUE	433	337 - 523	0,918	1129,18	24,8	30,40	1086
GREEN	562	443 - 687	1,212	1109,88	24,8	30,197	823
RED	788	576 - 1000	2,079	895,85	20.75	30,584	484

NOTES:

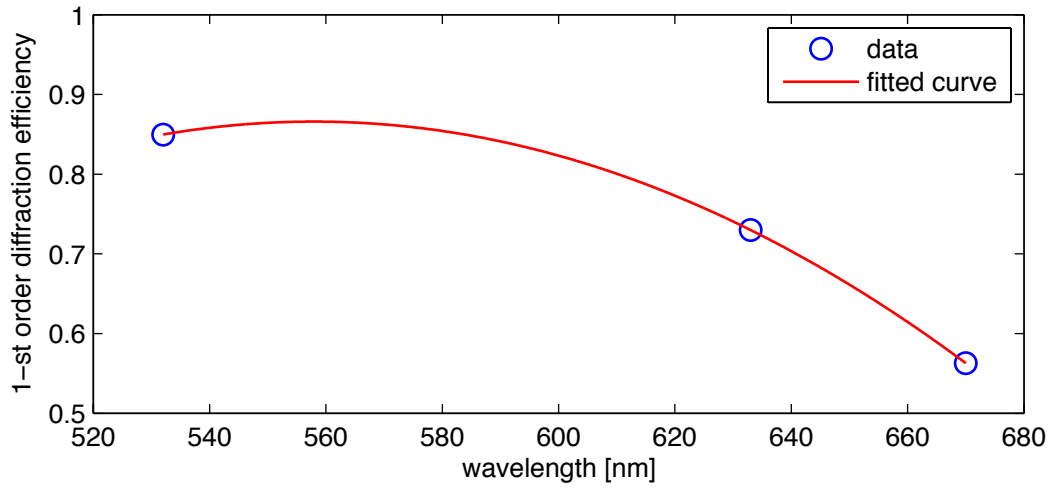
- 1) Considering a fixed parameter or the BK7 prism/s refractive index:
 $n_{\text{prism}} = 1.5273$ @ 430 nm for the BLUE grating;
 $n_{\text{prism}} = 1.5178$ @ 565 nm for the GREEN grating;
 $n_{\text{prism}} = 1.5122$ @ 735 nm for the RED grating.

- 2) The length of the CCD used for this calculation is 30.72 mm.

Efficiency measurements - *raw unpolarised data @ 0°* REDNOT



GREENNOT



BLUENOT

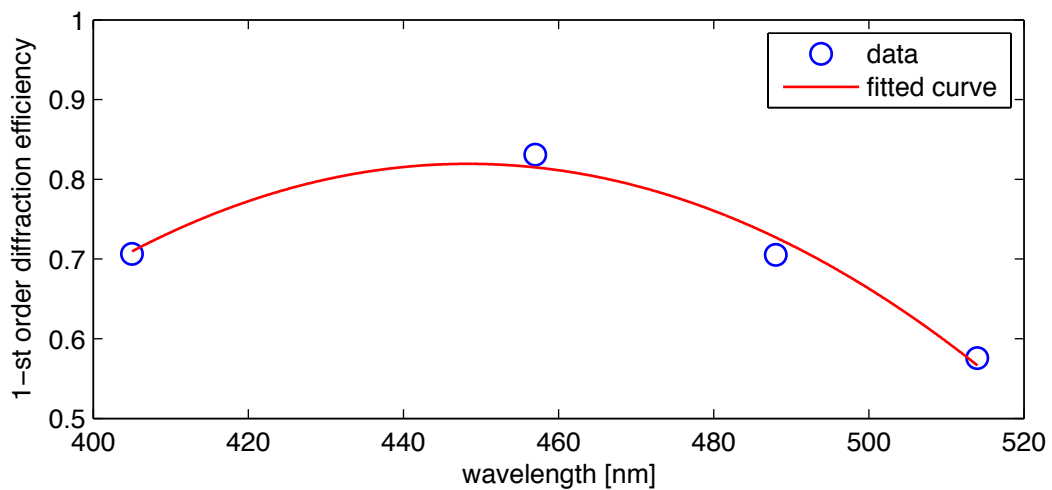


Photo of the devices

