

## Pre-Delivery Resonon Test Report

Identification Data	
Date	January 12, 2016
Resonon SN	100114-2
Instrument Name	BS2
Andor Camera SN	CCD-16345

Configuration	
Filters Installed	
1. Filter on front face of front prism: See Fig. 1a. 2. Filter on rear tilted substrate: See Fig. 1b.	
Sensors Installed	
1. 10K Ohm Thermister: Digikey part # 615-1010-ND; 3 units. 2. Humidity Sensor: Digikey part # 480-3294-1-ND	
Fiber bundle info: Leoni 800 $\mu$ m core fibers. See Fig. 2.	
Grating: Dec. 2014 batch. See Fig 3.	

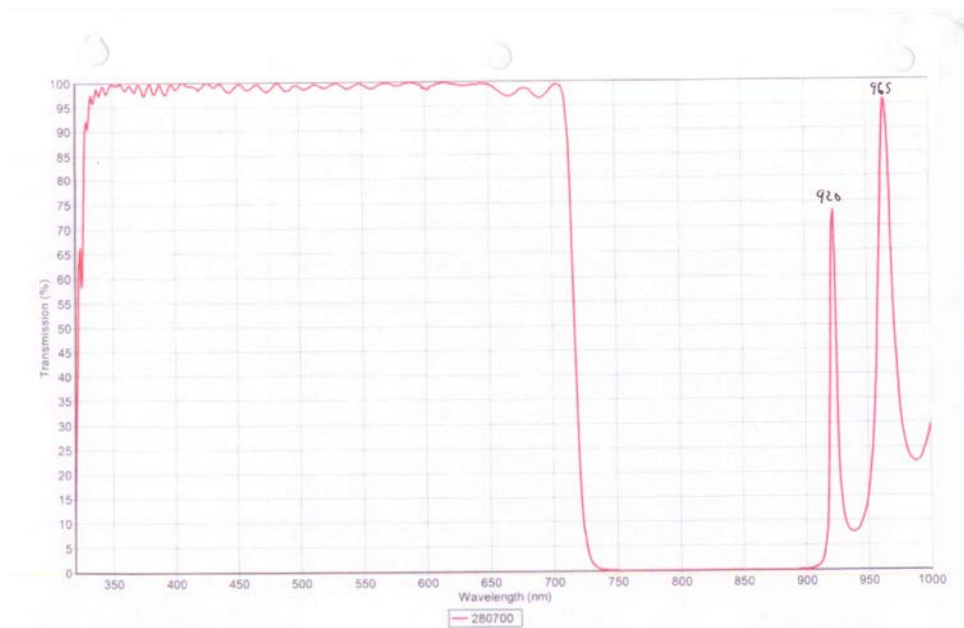
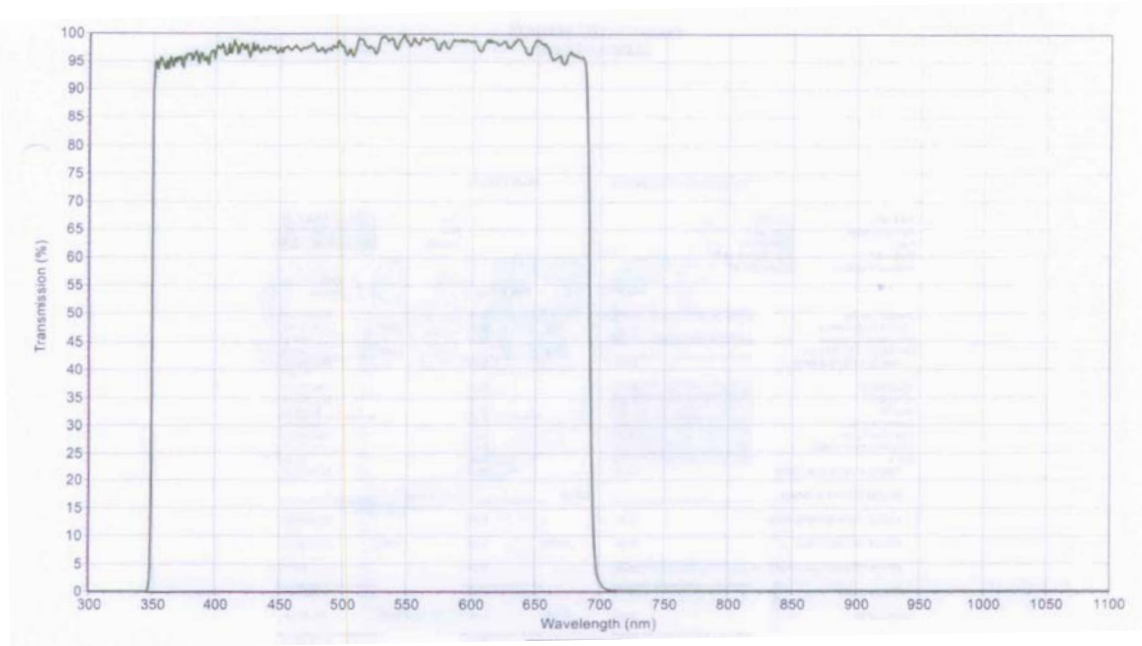


Figure 1a: Bandpass filter on front face of front prism



Figure

2b: Bandpass filter on rear tilted substrate

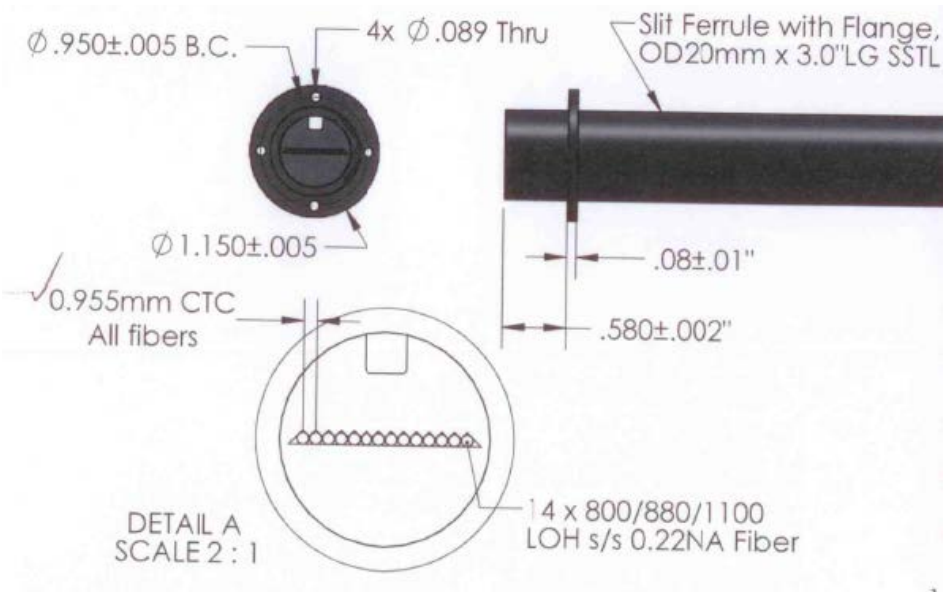


Figure 3: Leoni Fiber details

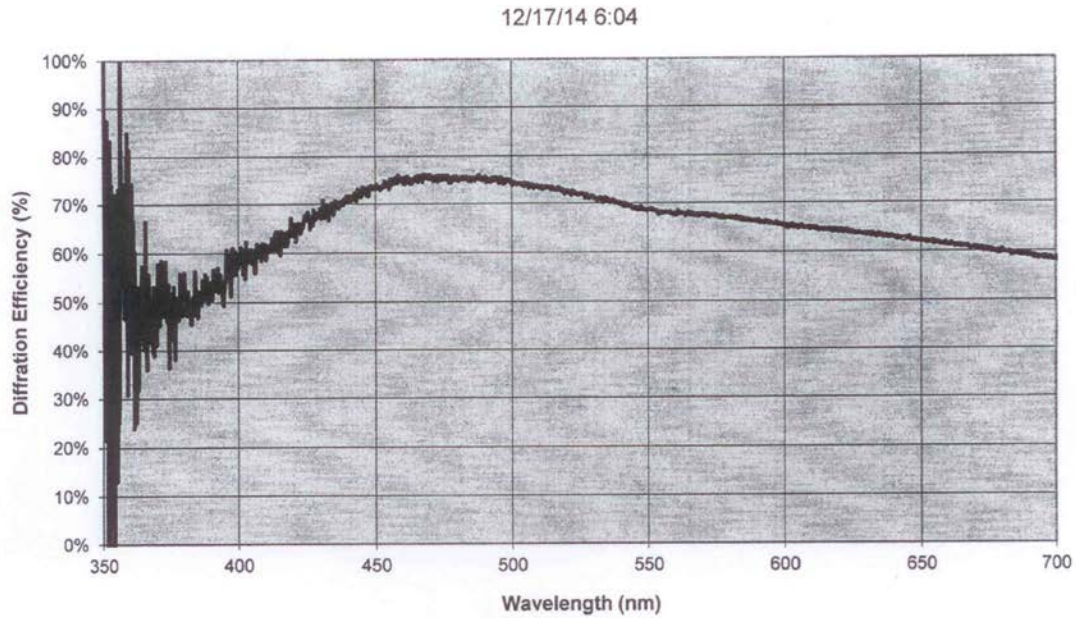


Figure 3: Grating efficiency.

Test Summary	
Smile (Peak to Trough)	
@ 382 nm	<0.2 pixels (Fig. 4)
@ 587 nm	<0.5 pixels (Fig. 5)
Keystone (Peak to Trough)	
Channel 1	1 pixel (Fig. 6)
Channel 14	1 pixel (Fig. 7)
Spectral Resolution (FWHM)	
@ 447 nm	0.7 nm
@ 587 nm	0.9 nm
Stability ("shake" test)	
No material change after shake.	

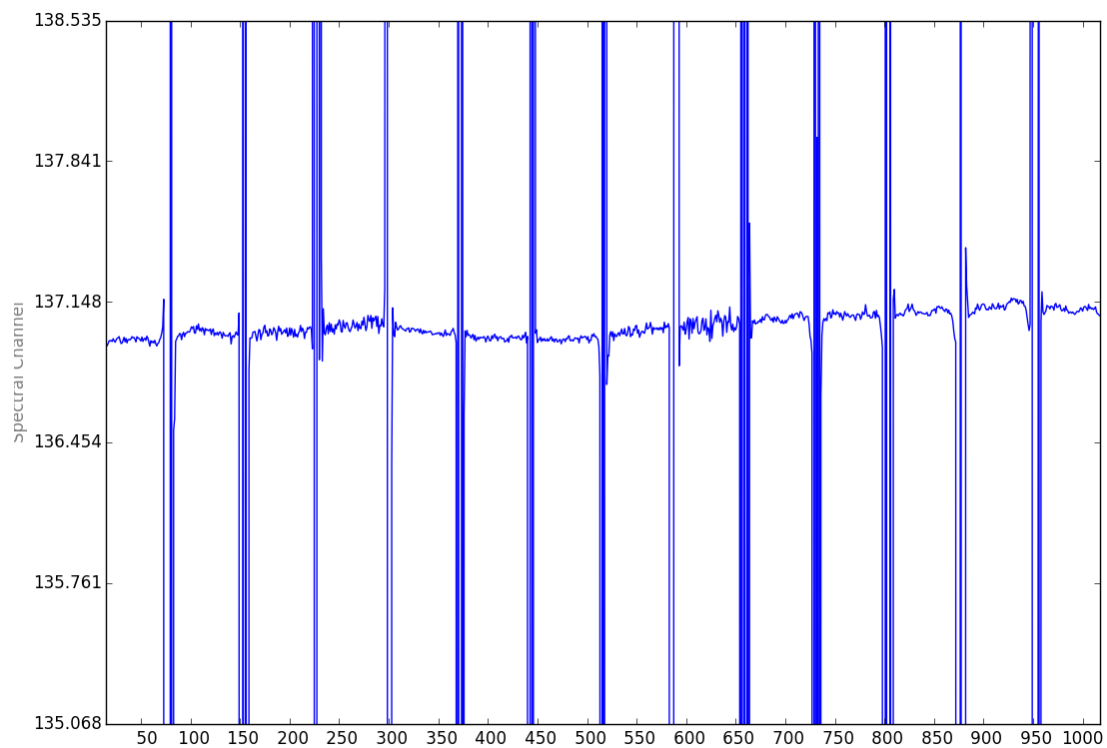


Figure 4: Smile at 382 nm. Horizontal axis is spatial channels and vertical axis is spectral.

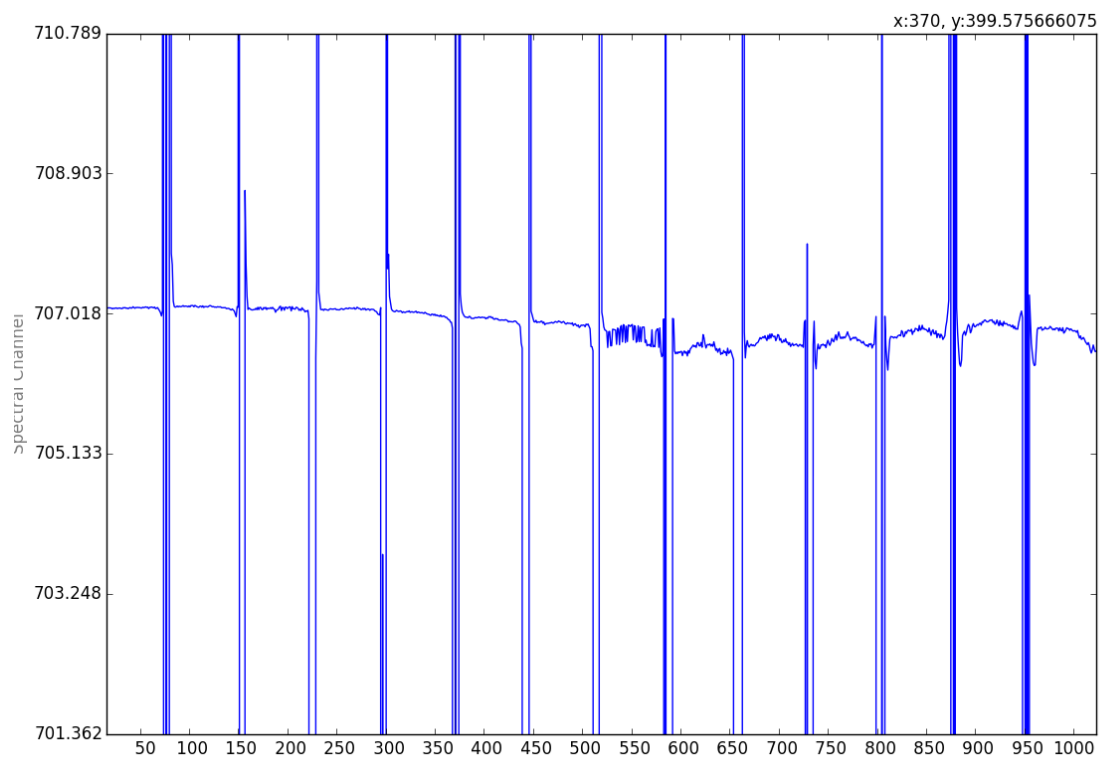


Figure 5: Smile at 587 nm.

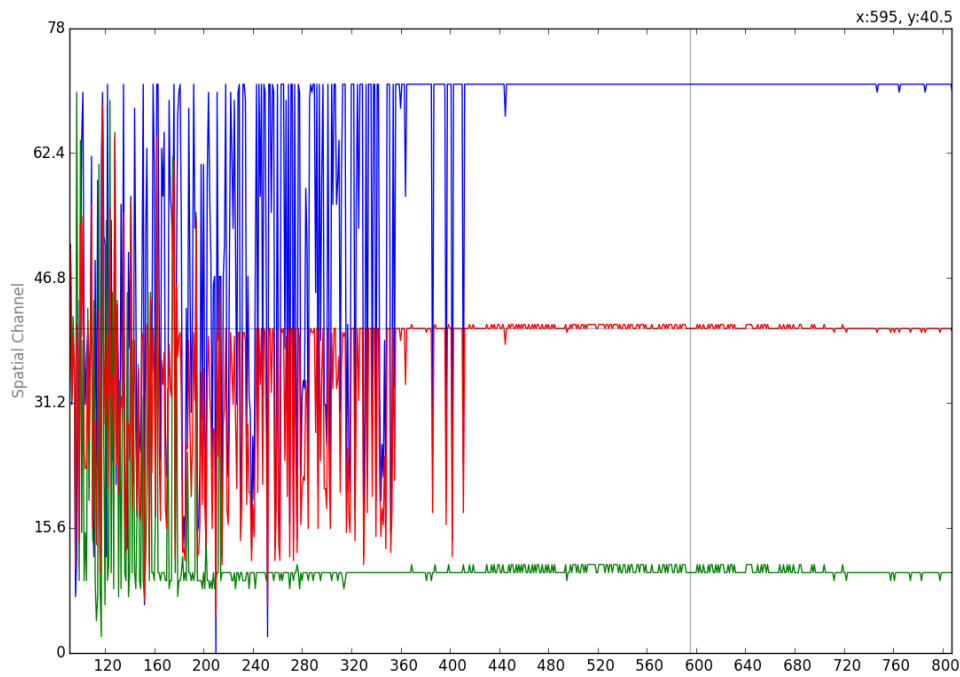


Figure 6: Channel 1 keystone. Blue is the sub-pixel measured edge of the top of the fiber channel, green is the bottom of the fiber channel, and red is the computed center.

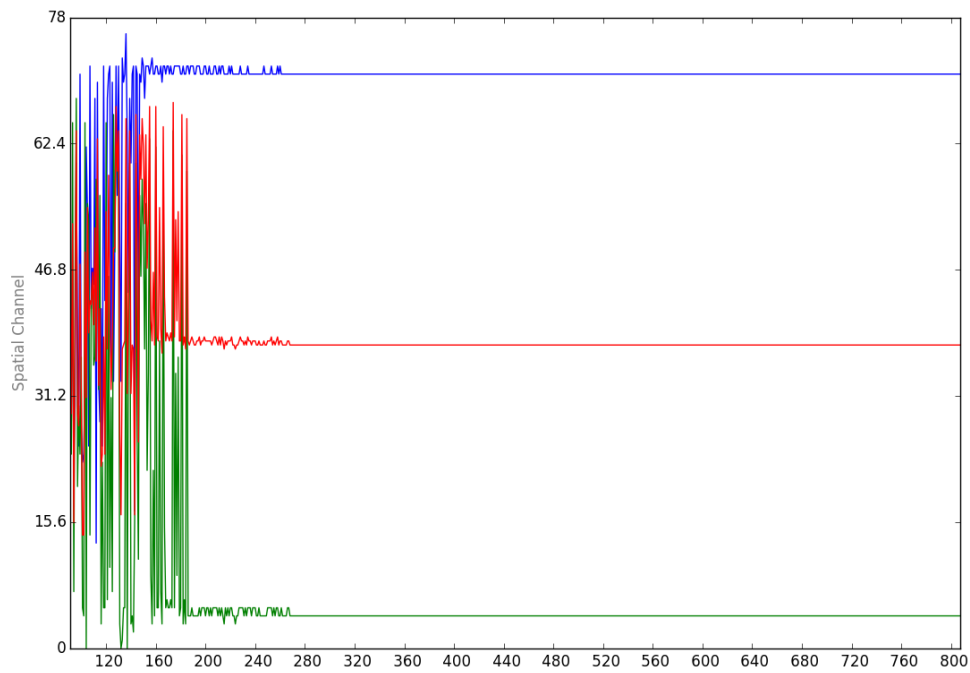


Figure 7: Channel 14 keystone. Blue is the sub-pixel measured edge of the top of the fiber channel, green is the bottom of the fiber channel, and red is the computed center.

