

MSE Diagnostic: Status and Plans

Nova Photonics, Inc.

- Installation of collection optics and fiber optics is complete.
- Development of a *tunable, high resolution, high throughput* spectral filter is complete.
- Diagnostic shakedown with 3-4 channels when NBI begins injection into plasma.
 - Measure Doppler shifted beam emission with 1/2 meter spectrometer.
 - Optimize birefringent filters.
 - Verify interference filter wavelengths and purchase additional filters.
 - Optimize detector/amplifier gains and purchase additional detectors.
 - Dedicated run time (1-2 days) for developing and testing calibration procedure.

- Increase number of channels to 10, ~3 months after start of MSE testing.
 - Optimize birefringent filters.
 - Dedicated run time (1-2 days) for calibration.
 - Begin taking data with 10 channels: ~June 2004.