Reflected power as a function of the tuner position from 14.5 GHz ECR.
1 December 2003

The 26 of November the current and the reflected power was measured as a function of the tuner position, the source in operation.

The reflected power has been measured, with a network analyzer, for a source without any plasma. The aim was to investigate if the behavior of the microwave transmission was the same with and without any plasma.

Results:

The reflected power with a plasma (red) shows the same pattern as the reflected power without any plasma (blue solid and blue dashed).

Then the reflected power was measured versus the position of the oven (500 → 1300). No significant change in the reflected power could be measured (2 dec).

Is this an indication of that the reflections mainly comes from the coupler region and not from inside the plasma chamber?