

# Measurements on a Brewster Window for a High Power Gyrotron

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**Abstract** – For modern high power gyrotrons low loss output windows are a key issue. Reflections at the output window can, if too high, influence the interaction of the electron beam and the excited wave in the gyrotron cavity. Theoretically, Brewster windows have no reflection, practically this is not the case, because the output beam has a Gaussian beam profile with curved phase fronts. We will present the latest results on the investigation of the reflective behavior of the output window for the 170 GHz coaxial cavity ITER pre-prototype gyrotron.