X mode reflectometry system operating in the frequency range from 26 - 36 GHz is considered based on heterodyne detection.

E plane sectorial horn antenna and vacuum window are designed in CST microwave studio.

Microwave hardware like VCO, frequency doubler, power splitter, SSBM and LNA have been tested.

A density inversion program has been developed and tested based on Bottolier-curtet algorithm.