

Abstract Submitted
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Tests of the modified JET ITER-Like ICRH Antenna High Power Prototype¹ F.W. BAITY, R.H. GOULDING, M. BROWN, A. FADNEK, K.D. FREUDENBERG, B.E. NELSON, D.A. RASMUSSEN, D.O. SPARKS, Oak Ridge National Laboratory, J.C. HOSEA, G.D. LOESSER, PPPL, F. DURODIÉ, M. VRANCKEN, ERM/KMS Brussels, M. NIGHTINGALE, R. WALTON, UKAEA, WORKPROGRAMME CONTRIBUTORS AND EFDA-JET TEAM — The second round of tests of the JET ITER-Like Ion Cyclotron Resonance Heating Antenna High Power Prototype (HPP) has recently been completed. The purpose of the device is to test the advanced features of the actual antenna, designed to couple ≥ 7.1 MW into an ELMy H-Mode Plasma on JET. Before the most recent tests, modifications were made to the current straps, antenna enclosure, limiter tiles, and capacitors. The maximum voltage at the capacitors achieved during long pulse (10 s) operation has been increased from 23 kV (peak) to ~ 40 kV. The capacitor voltage achieved during .05 s pulses with limiter tiles installed has increased from 24 kV to ~ 50 kV. These and other results, reasons for the improved performance, and implications for the operation of the JET ITER-Like Antenna will be discussed.

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