

Bunch Compressor Performances in the CLIC Test Facility, K. AULENBACHER, H. BRAUN, F. CHAUTARD, R. CORSINI, J.H.B. MADSEN, L. RINOLFI, CERN - The Test facility of the Compact Linear Collider (CLIC) study at CERN develops the technique of the generation of dense electron bunches with short lengths as source of the drive beam for RF production for a Two Beam Acceleration scheme at high frequency (30 GHz). A magnetic bunch compressor has recently been installed in the beam line downstream of a laser driven photoinjector. Excellent compression ratio and bunch lengths as short as 0.6 mm (rms) have been obtained with a charge of 10 nC. Measured performances in bunch lengths and transverse emittances at various charges per bunch up to 17 nC are reported and compared with simulations.