

LHC Collimator - Test Case

FLUKA Model

Dimensions : 20 x 100 x 1500 mm³ ;

Material : Carbon (1.77 g/cm³) ;

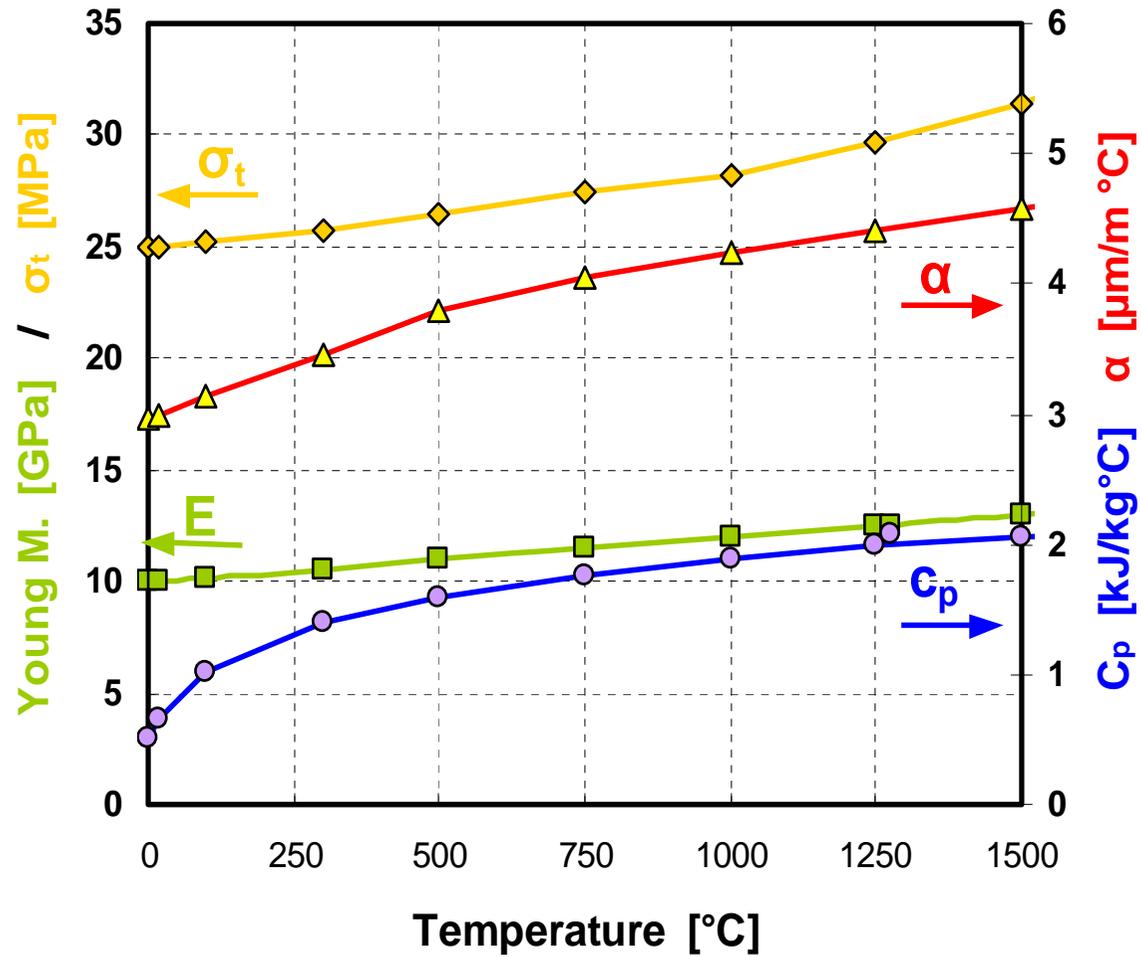
Be (1.85 g/cm³) ;

Beam parameters: 7 TeV protons, $\sigma = 0.3$ mm,

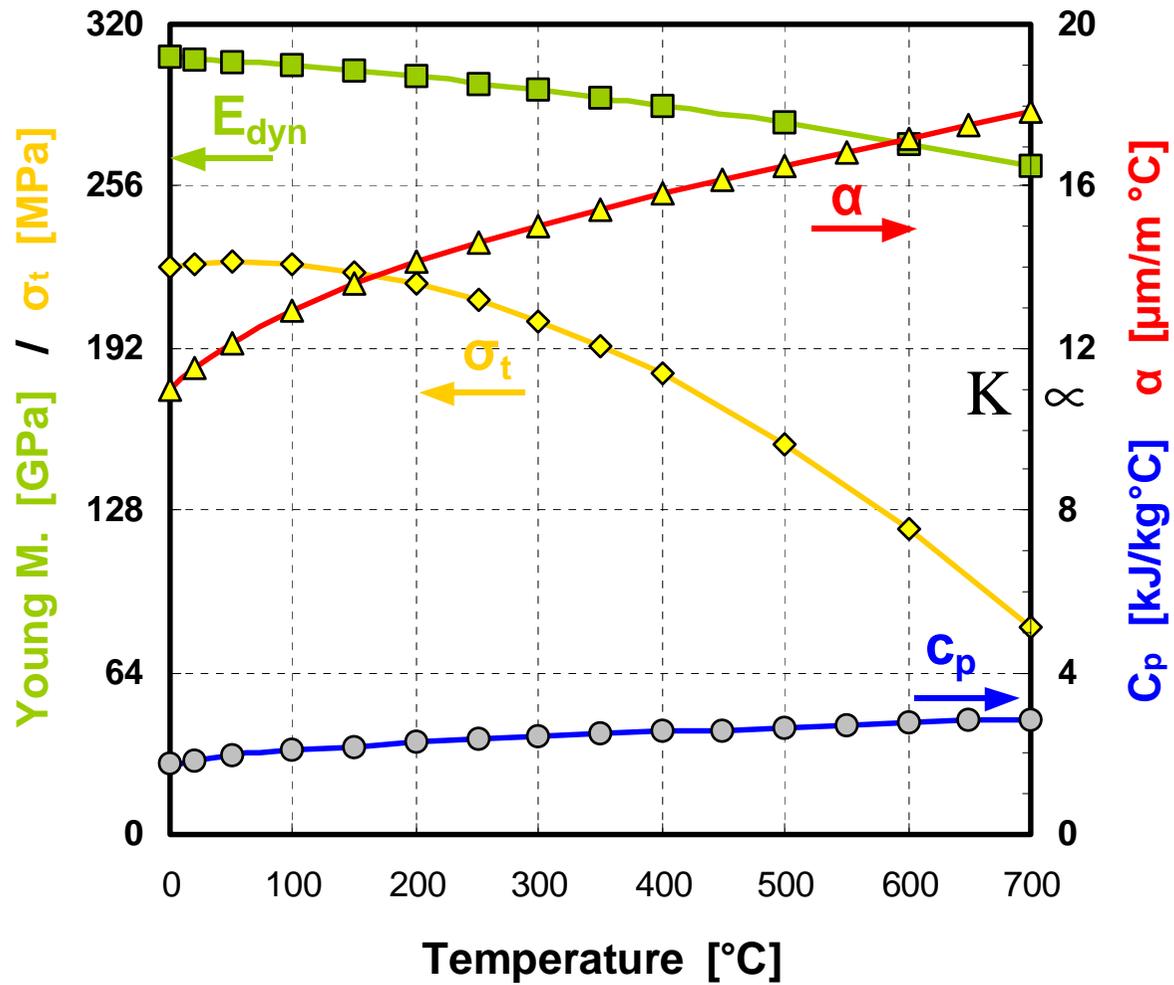
intensity: nominal 1.05×10^{11} ; ultimate: 1.7×10^{11}

15 bunches spaced 0.1 mm

Graphite Properties

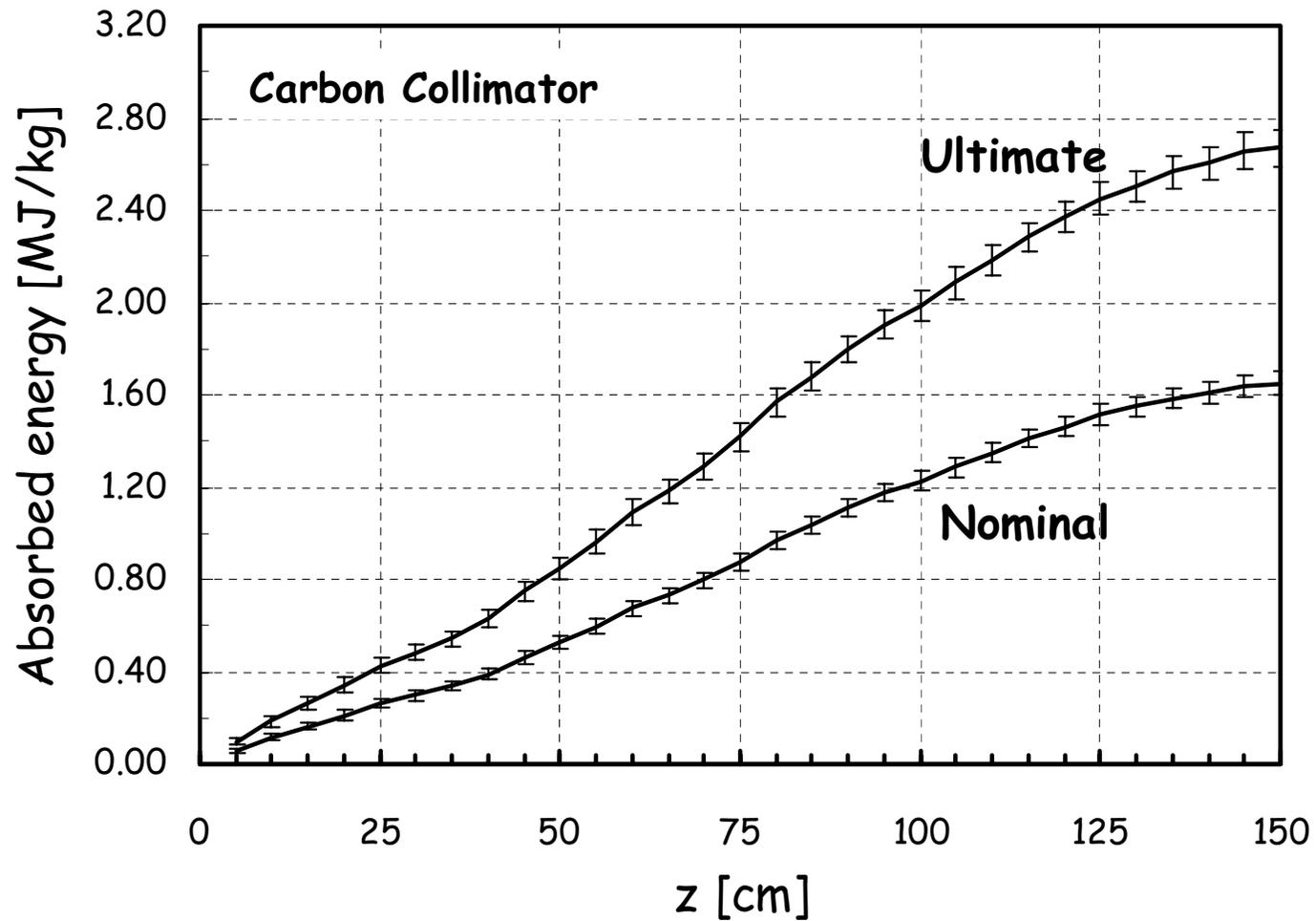


Beryllium Properties



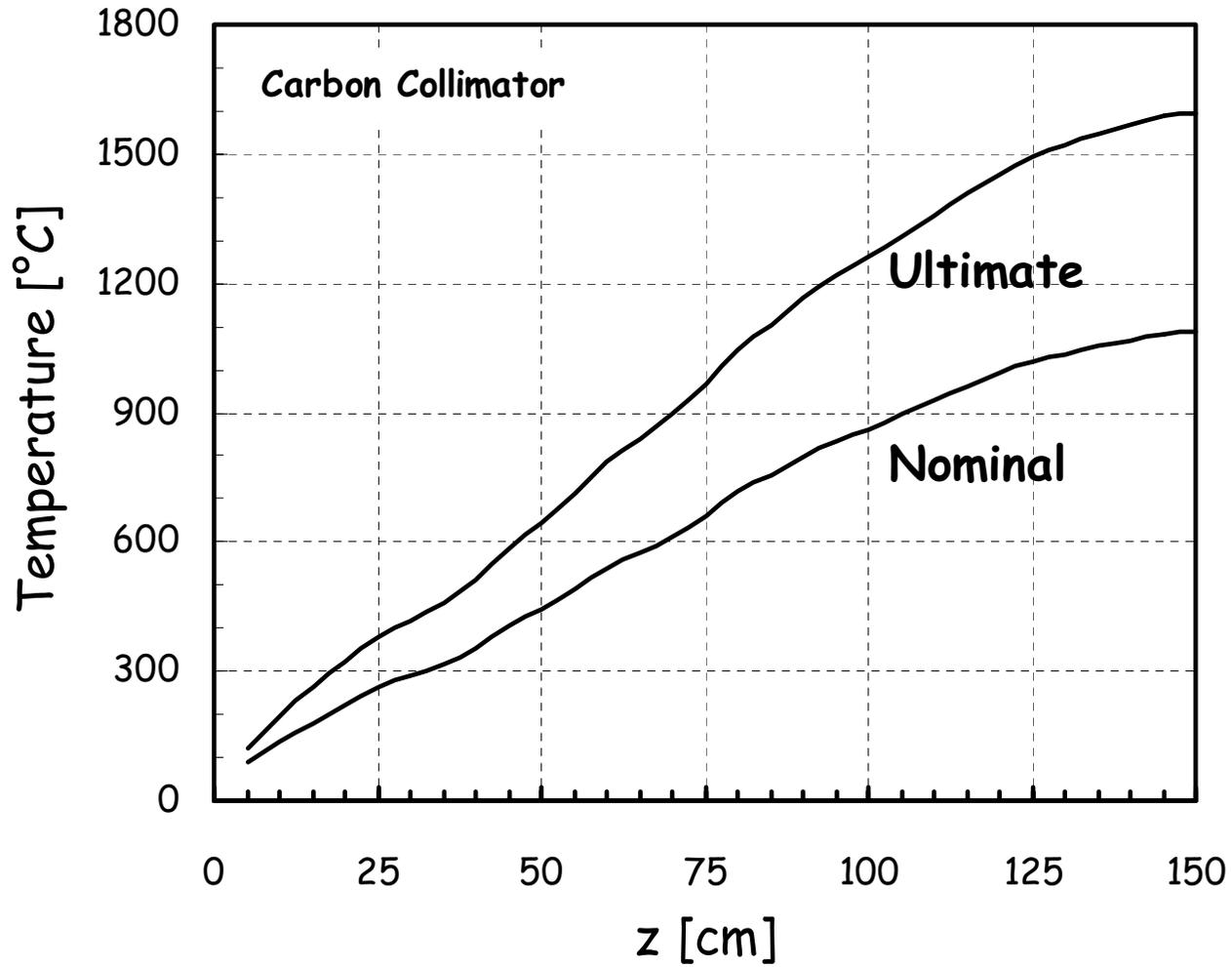
LHC Collimator Test Case

Longitudinal profile of the absorbed energy



LHC Collimator Test Case

Longitudinal temperature profile



LHC Collimator Test Case

Longitudinal temperature profile

