5. Performance Requirements.

5.1 Legform to Bumper:

5.1.1 At the choice of the manufacturer, the lower legform to bumper performance shall be verified according to Item 5.1.1.1 or 5.1.1.2 below

5.1.1.1 RIGID: When tested in accordance with section 7.1.1 (lower legform to bumper), the maximum dynamic knee bending angle shall not exceed [21.0°], the maximum dynamic knee shearing displacement shall not exceed [6.0mm], and the acceleration measured at the upper end of the tibia shall not exceed [200g]

5.1.1.2 Flex; When tested in accordance with section 7.1.1 (lower legform to bumper), the maximum dynamic knee elongations shall not exceed [20 mm for MCL (comparable to 20 deg.), 10 mm for ACL, and 10 mm for PCL], the maximum dynamic strains on the bone core of the leg shall not exceed [15,000 microstrain (comparable strain with 350 Nm)].

5.1.2 When tested in accordance with section 7.2.1 (Upper legform to bumper), the instantaneous sum of the impact forces with respect to time shall not exceed [7.5kN] and the bending moment on the test impactor shall not exceed [510Nm].