The Gauss program codes

bound1.prg
bound2.prg

provide two lower bounds described in the paper "Testing for Regime Switching" by Jin Seo Cho and Halbert White.

The program "bound1.prg" provides the conservative critical values of the (Q)LR test statistics according to Theorem 7 for the examples in Section 2.5.

The program "bound2.prg" provides the conservative critical values of the (Q)LR test statistics according to Theorem 8 for the examples in Section 2.5.

The reported critical values in Table 1 are the minimum of these two values.