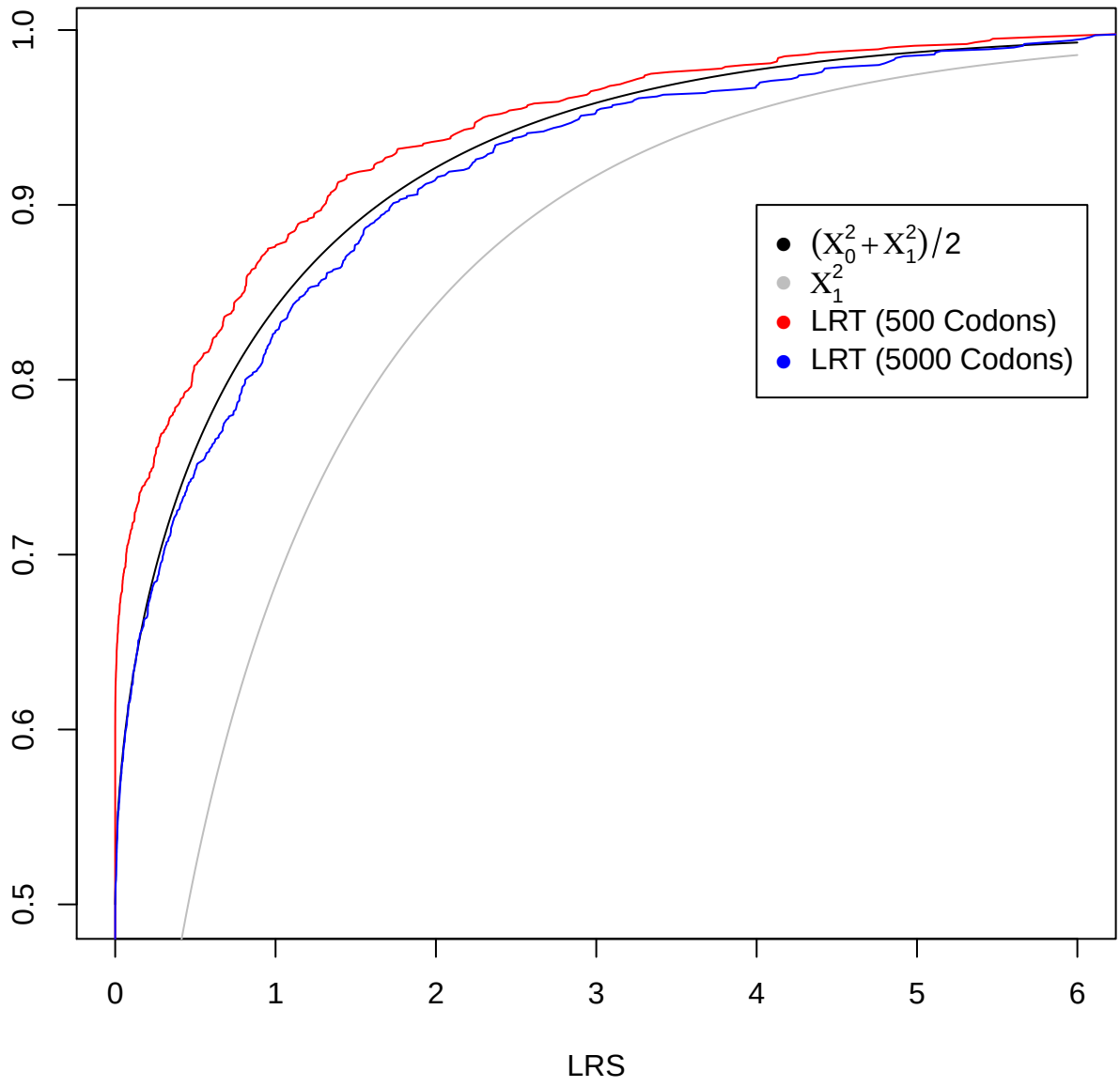
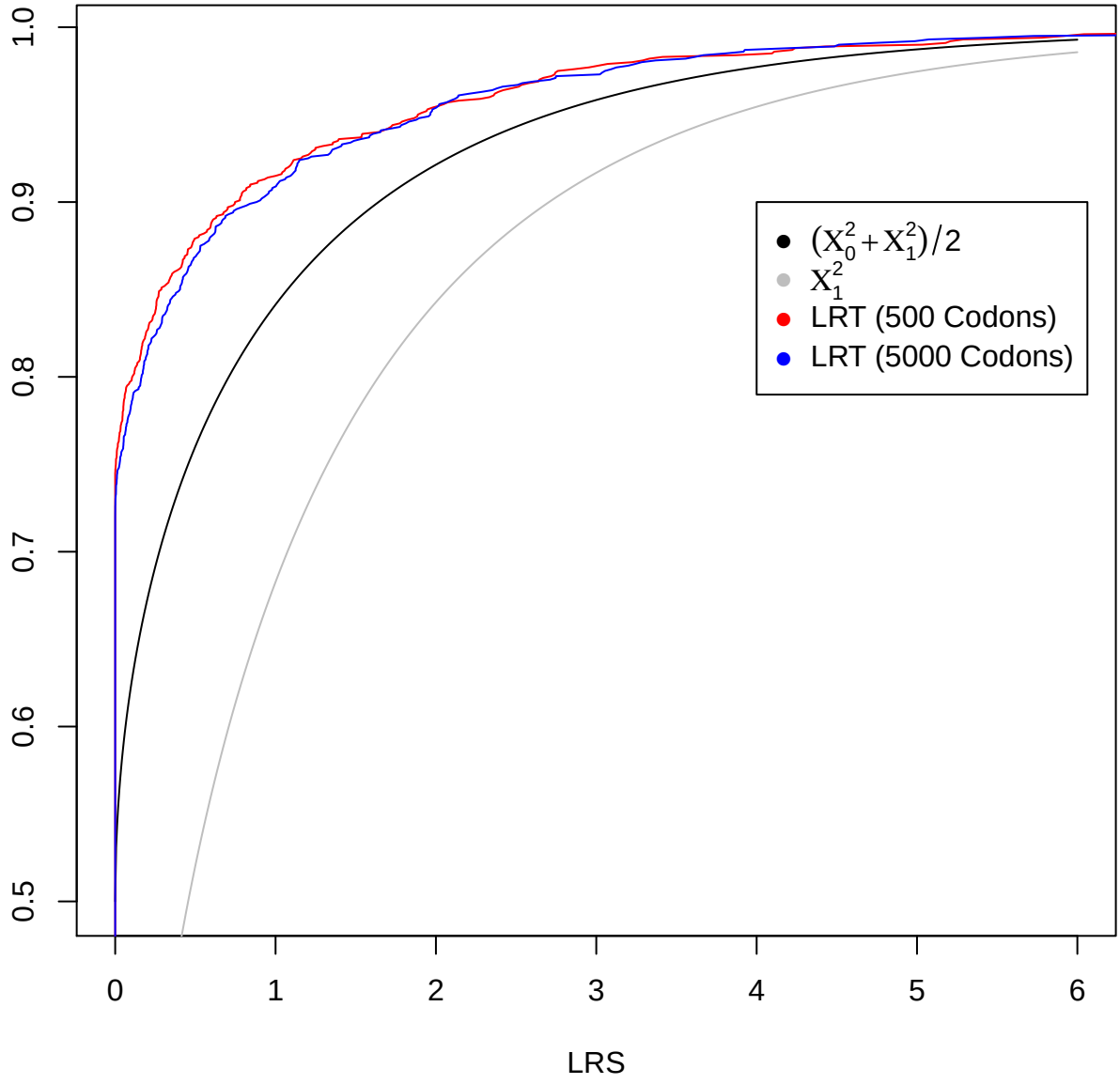
Simulations under the null for branch-site model A
Comparing 500 and 5000 codons

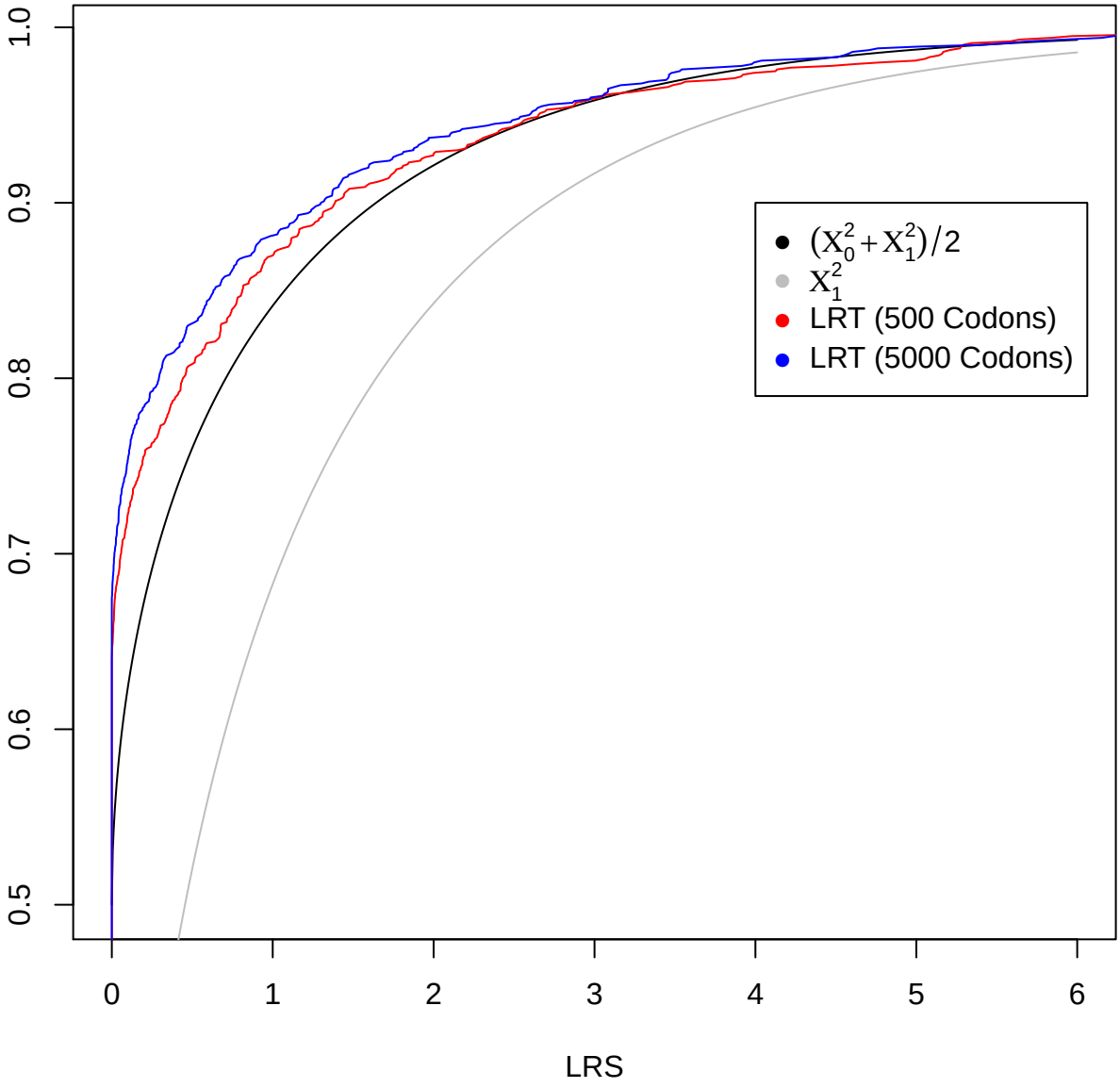
Sim 2
Symmetric, 8-taxon tree with one foreground branch
The total tree length is 3.
tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,((E:0.214286,F:0.214286):
$\kappa = 2.0$ $p_0 = 0.7$ $p_1 = 0.2$ $\omega_0 = 0.3$



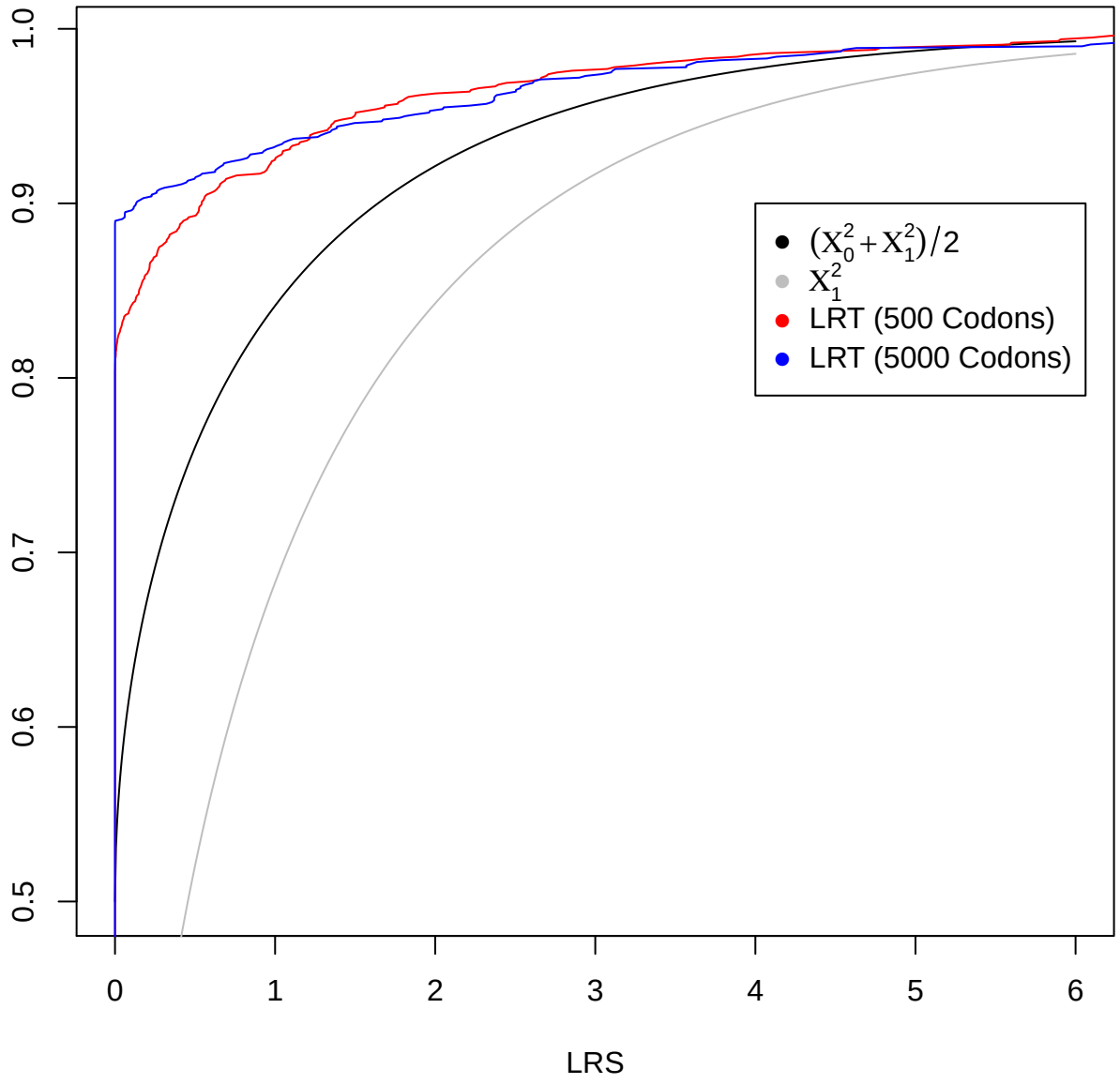
Sim 3
Symmetric, 8-taxon tree with one foreground branch
The total tree length is 3.
tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,
((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
$\kappa = 2.0$ $p_0 = 0.75$ $p_1 = 0.25$ $\omega_0 = 0.3$



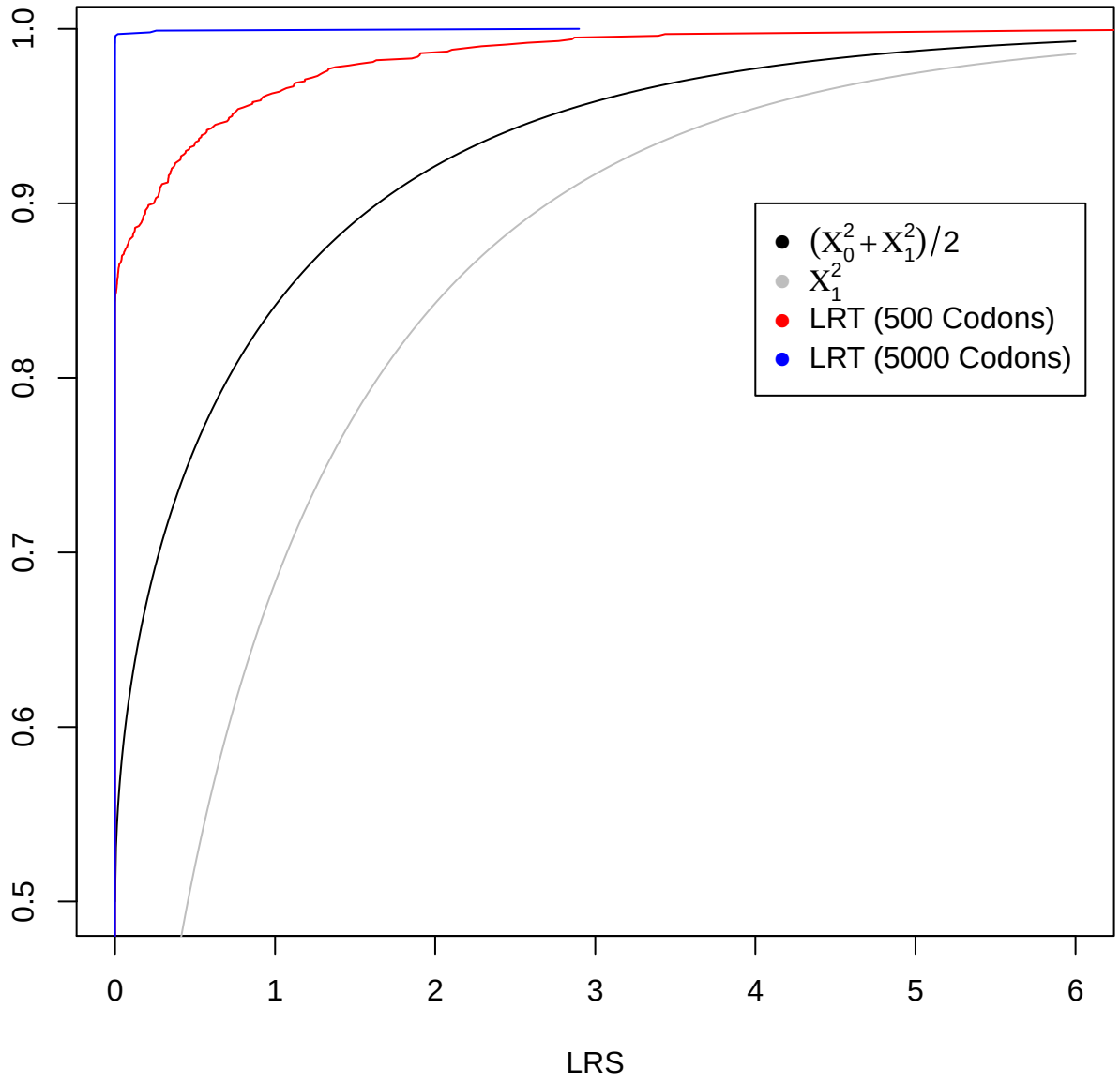
Sim 4
Symmetric, 8-taxon tree with one foreground branch
The total tree length is 3.
tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,
((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
$\kappa = 2.0$ $p_0 = 0.25$ $p_1 = 0.75$ $\omega_0 = 0.3$



Sim 13
Symmetric, 8-taxon tree with one branch in the foreground
The total tree length is 3.
tree: (((A#1:0.214286,B:0.214286):0.214286,(C:0.214286,D:0.214286):0.214286):0.214286,((E:0.214286,
F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
M3 k=3 $[p0, p1, p2] = [0.4, 0.4, 0.2]$ $[w0, w1, w2] = [0.1, 0.5, 0.9]$ $\kappa = 2.0$



Sim 14
Symmetric, 8-taxon tree with half of the tree in the foreground
The total tree length is 3.
tree: (((A#1:0.214286,B#1:0.214286)#1:0.214286,(C#1:0.214286,D#1:0.214286)#1:0.214286)
#1:0.214286,((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
M3 k=3 $[p0, p1, p2] = [0.4, 0.4, 0.2]$ $[w0, w1, w2] = [0.1, 0.5, 0.9]$ $\kappa = 2.0$



Sim 15
Symmetric, 8-taxon tree with half of the tree in the foreground
The total tree length is 3.
tree: (((A#1:0.214286,B#1:0.214286)#1:0.214286,(C#1:0.214286,D#1:0.214286)#1:0.214286)
#1:0.214286,((E:0.214286,F:0.214286):0.214286,(G:0.214286,H:0.214286):0.214286):0.214286);
M3 k=3 $[p0, p1, p2] = [0.4, 0.2, 0.4]$ $[w0, w1, w2] = [0.1, 0.5, 1.0]$ $\kappa = 2.0$