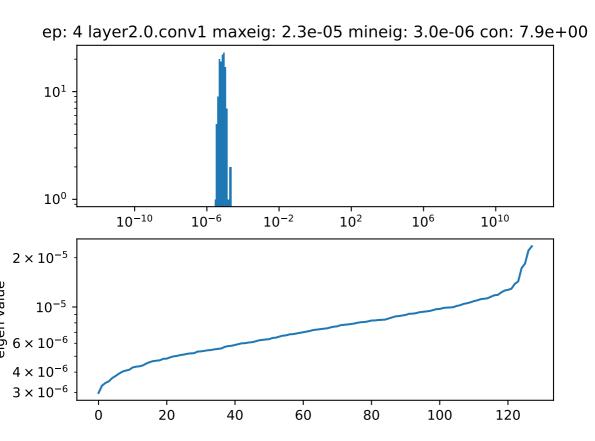
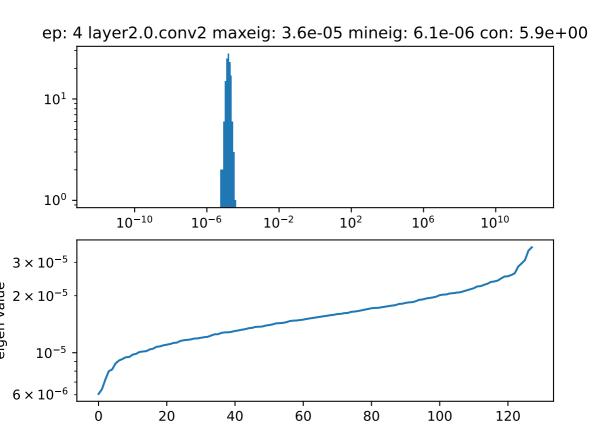


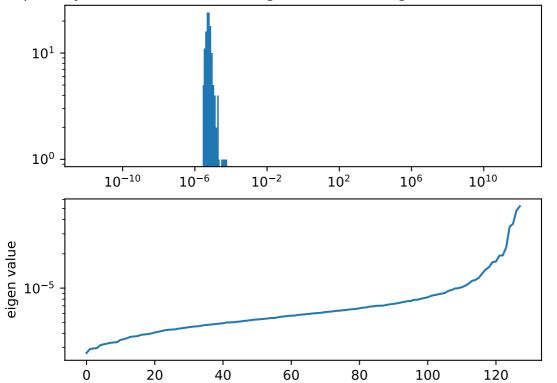
ep: 4 layer1.1.conv2 maxeig: 1.1e-04 mineig: 1.2e-05 con: 9.1e+00  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-2  $10^{-6}$ 10<sup>6</sup>  $10^{-4}$ 50 60 10 20 30 40

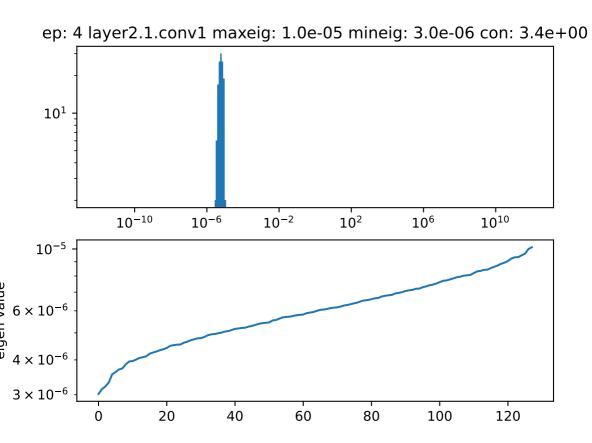
eigen value

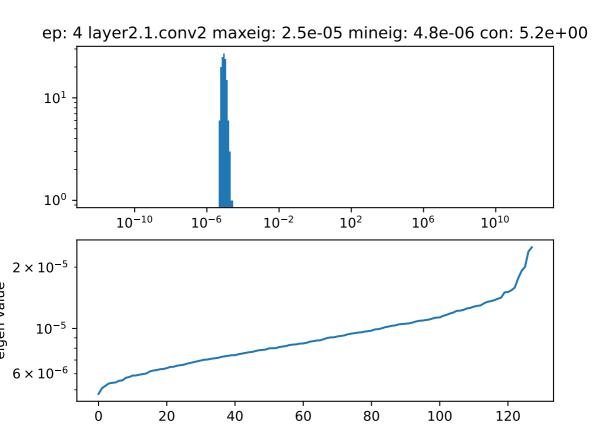




ep: 4 layer2.0.shortcut.0 maxeig: 5.2e-05 mineig: 2.7e-06 con: 1.9e+01



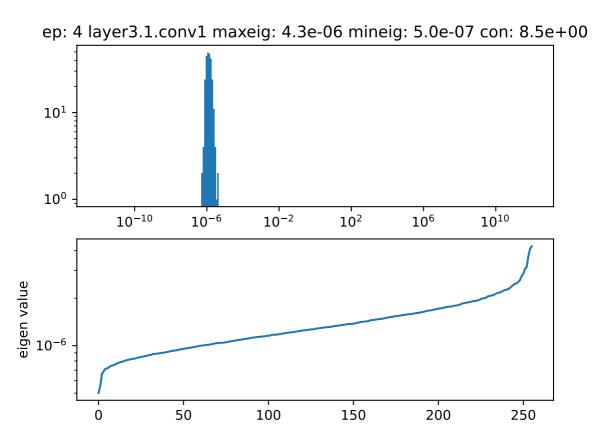




ep: 4 layer3.0.conv1 maxeig: 6.9e-06 mineig: 5.2e-07 con: 1.3e+01 10<sup>1</sup> 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-6 10-2 10<sup>6</sup> eigen value 10<sup>-6</sup> 250 50 100 150 200

ep: 4 layer3.0.conv2 maxeig: 1.8e-05 mineig: 1.6e-06 con: 1.1e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup>  $10^{-6}$ 10-2 10<sup>6</sup> eigen value 10<sup>-5</sup> 250 50 100 150 200

ep: 4 layer3.0.shortcut.0 maxeig: 2.6e-05 mineig: 3.8e-07 con: 6.7e+01  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$ eigen value 250 50 100 150 200

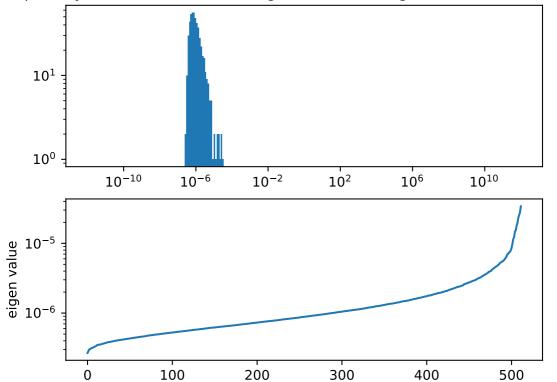


ep: 4 layer3.1.conv2 maxeig: 2.2e-05 mineig: 9.8e-07 con: 2.2e+01 10<sup>1</sup> 10<sup>0</sup> 10 10 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$ eigen value 10<sup>-2</sup>  $10^{-6}$ 250 50 100 150 200

ep: 4 layer4.0.conv1 maxeig: 1.1e-05 mineig: 8.1e-08 con: 1.4e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-5}$ eigen value  $10^{-7}$ 100 500 200 300 400

ep: 4 layer4.0.conv2 maxeig: 2.9e-05 mineig: 4.8e-07 con: 6.1e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup> 10-2 10<sup>6</sup>  $10^{-6}$ 10<sup>-5</sup> eigen value  $10^{-6}$ 100 500 200 300 400

ep: 4 layer4.0.shortcut.0 maxeig: 3.4e-05 mineig: 2.7e-07 con: 1.3e+02



ep: 4 layer4.1.conv1 maxeig: 3.3e-05 mineig: 1.3e-07 con: 2.5e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup> eigen value 10<sup>-6</sup>  $10^{-7}$ 100 500 200 300 400

ep: 4 layer4.1.conv2 maxeig: 1.1e-04 mineig: 1.7e-07 con: 6.2e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sup>-5</sup> 10<sup>-5</sup> 100 500 200 300 400

