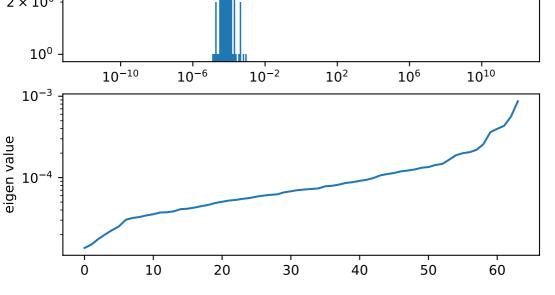
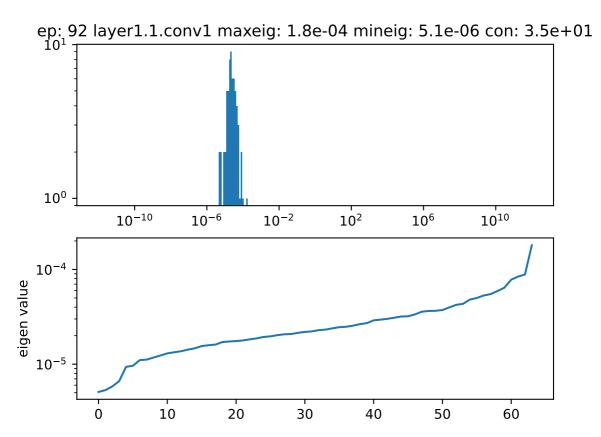


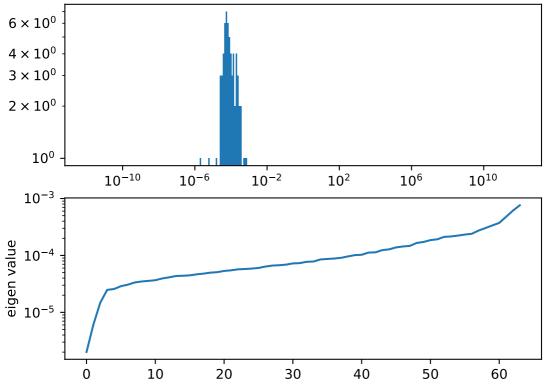
ep: 92 layer1.0.conv1 maxeig: 5.6e-03 mineig: 1.1e-05 con: 5.2e+02  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup> 10<sup>-3</sup> eigen value  $10^{-4}$ 10<sup>-5</sup> 50 60 10 20 30 40

ep: 92 layer1.0.conv2 maxeig: 8.7e-04 mineig: 1.4e-05 con: 6.3e+01  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10 10 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-3}$ 

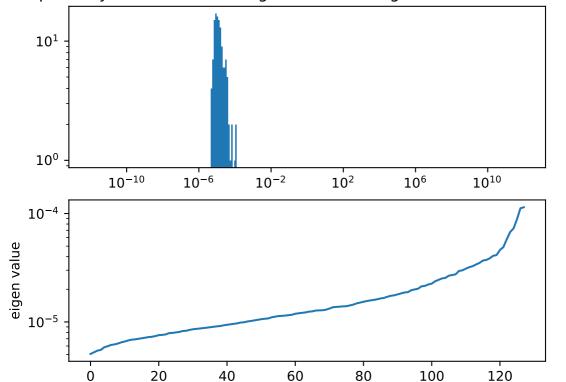




ep: 92 layer1.1.conv2 maxeig: 7.6e-04 mineig: 2.0e-06 con: 3.8e+02

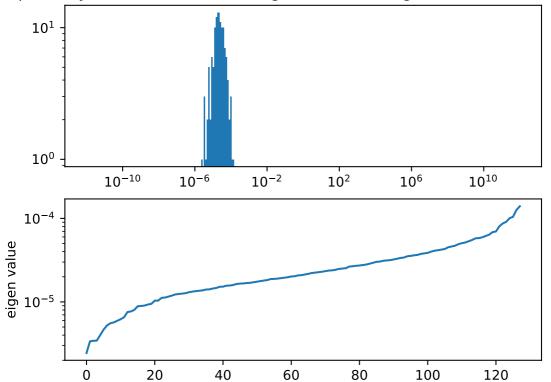


ep: 92 layer2.0.conv1 maxeig: 1.1e-04 mineig: 5.1e-06 con: 2.3e+01

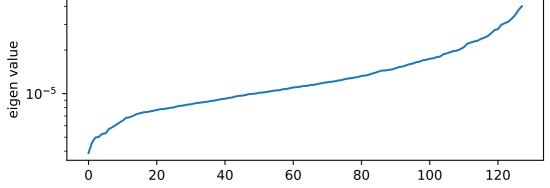


ep: 92 layer2.0.conv2 maxeig: 1.7e-04 mineig: 1.8e-06 con: 9.4e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sup>-2</sup> 20 60 100 120 40 80

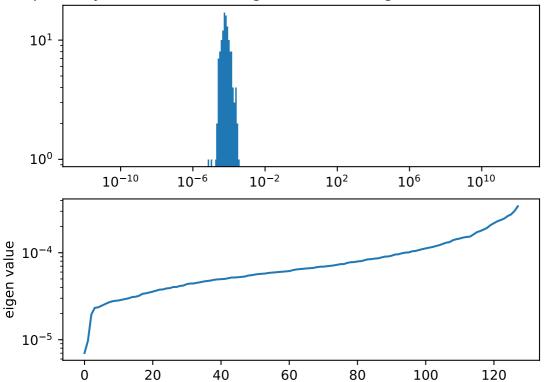
ep: 92 layer2.0.shortcut.0 maxeig: 1.4e-04 mineig: 2.4e-06 con: 5.7e+01



ep: 92 layer2.1.conv1 maxeig: 4.0e-05 mineig: 3.9e-06 con: 1.0e+01  $10^{1}$ 10<sup>10</sup> 10<sup>2</sup> 10-10 10-2 10<sup>6</sup>  $10^{-6}$ 

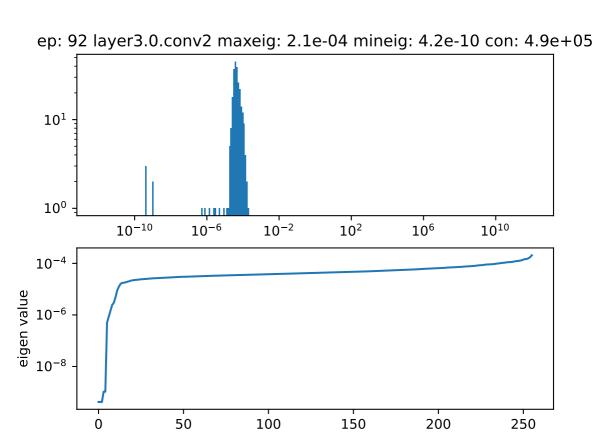


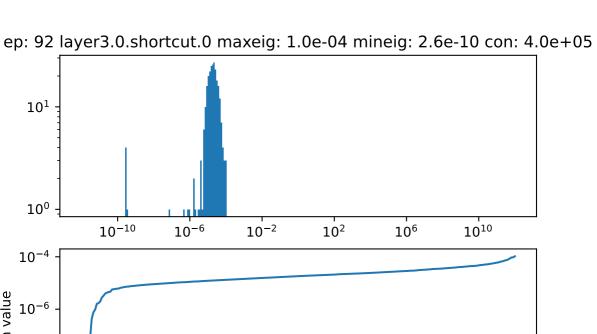
ep: 92 layer2.1.conv2 maxeig: 3.4e-04 mineig: 7.0e-06 con: 4.9e+01

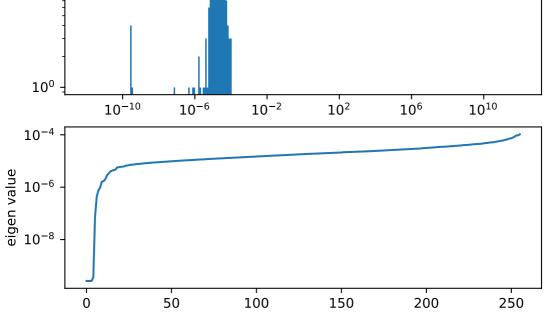


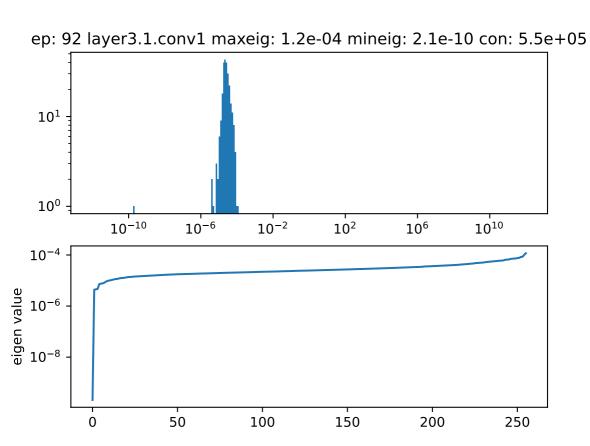
ep: 92 layer3.0.conv1 maxeig: 7.2e-05 mineig: 1.1e-10 con: 6.9e+05  $10^{1}$ 1010  $10^{-10}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$ 10<sup>-5</sup>  $10^{-9}$ 250 50 100 150 200

eigen value









ep: 92 layer3.1.conv2 maxeig: 5.9e-04 mineig: 8.0e-06 con: 7.4e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup>  $10^{-4}$  $10^{-5}$ 250

100

150

200

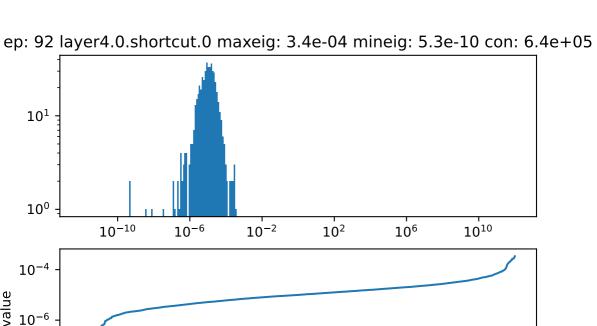
50

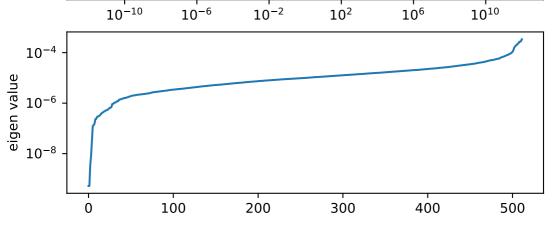
eigen value

ep: 92 layer4.0.conv1 maxeig: 2.5e-04 mineig: 2.0e-06 con: 1.3e+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> 100 500 200 300 400

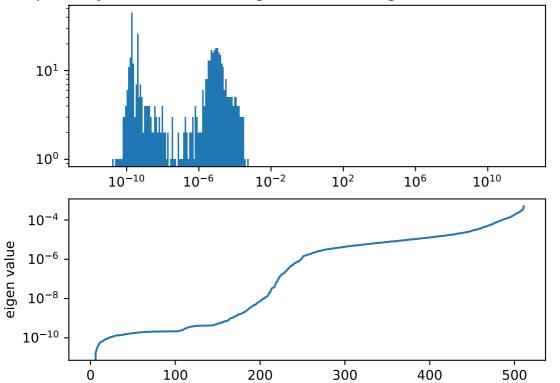
ep: 92 layer4.0.conv2 maxeig: 7.1e-04 mineig: 8.4e-10 con: 8.4e+05  $10^{1}$ 10<sup>0</sup> 1010 10-10 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-4}$  $10^{-6}$ 10-8 100 500 200 300 400

eigen value





ep: 92 layer4.1.conv1 maxeig: 5.0e-04 mineig: -3.5e-11 con: 1.9e+09



ep: 92 layer4.1.conv2 maxeig: 1.5e-03 mineig: 8.4e-10 con: 1.8e+06

