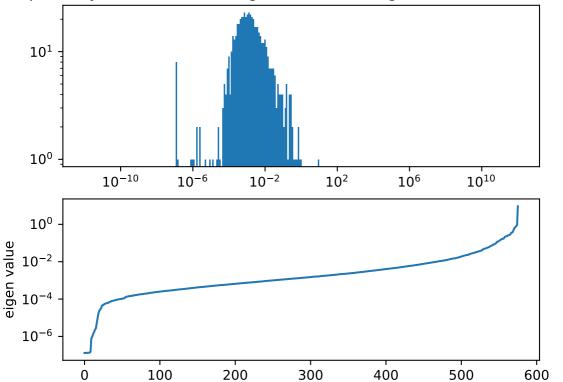
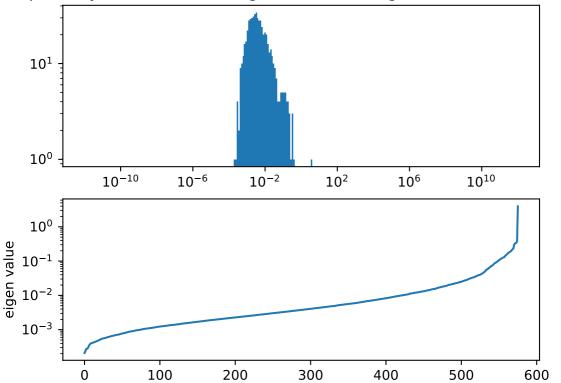
ep: 66 conv1 maxeig: 5.8e+01 mineig: 3.8e-03 con: 1.5e+04  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10-6 10-2 10<sup>2</sup> 10<sup>6</sup> 10<sup>1</sup> eigen value 10<sup>-1</sup>  $10^{-2}$ 10 15 25 20

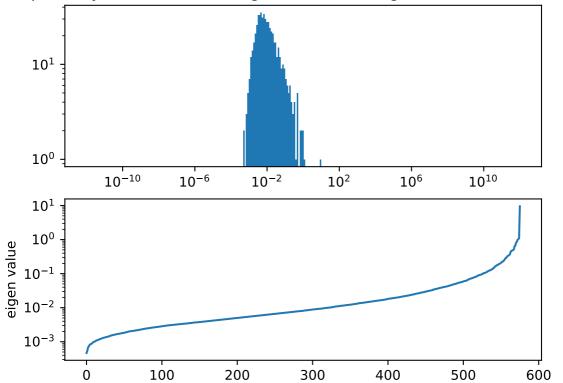
ep: 66 layer1.0.conv1 maxeig: 9.3e+00 mineig: 1.3e-07 con: 7.1e+07



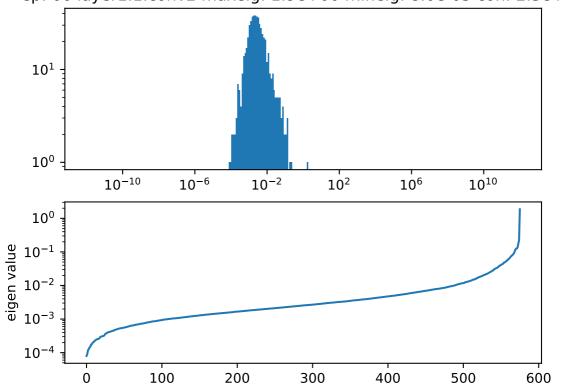
ep: 66 layer1.0.conv2 maxeig: 4.0e+00 mineig: 2.1e-04 con: 1.9e+04



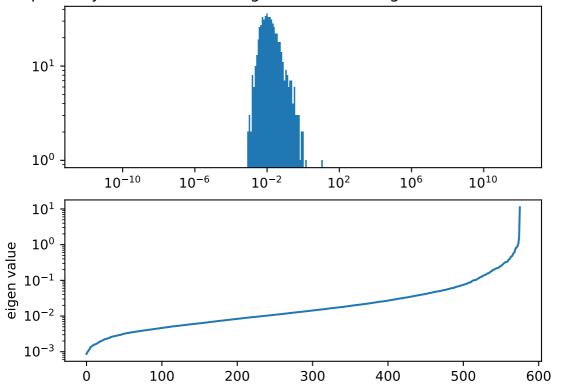
ep: 66 layer1.1.conv1 maxeig: 9.5e+00 mineig: 4.7e-04 con: 2.0e+04



ep: 66 layer1.1.conv2 maxeig: 1.9e+00 mineig: 8.0e-05 con: 2.3e+04



ep: 66 layer2.0.conv1 maxeig: 1.1e+01 mineig: 8.7e-04 con: 1.3e+04



ep: 66 layer2.0.conv2 maxeig: 3.4e+00 mineig: 6.7e-04 con: 5.1e+03  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-2}$  $10^{-6}$ 10<sup>2</sup> 10<sup>6</sup> 10<sup>0</sup> 10<sup>-3</sup>

600

800

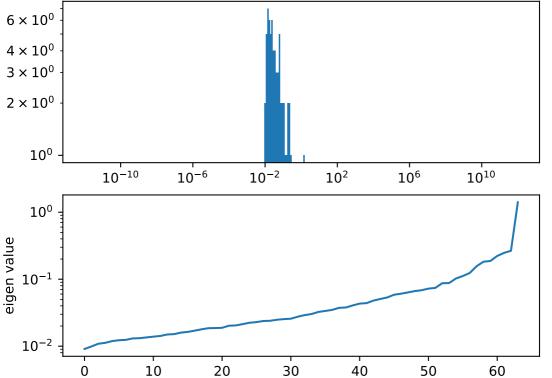
1000

1200

200

400

ep: 66 layer2.0.shortcut.0 maxeig: 1.4e+00 mineig: 9.1e-03 con: 1.5e+02

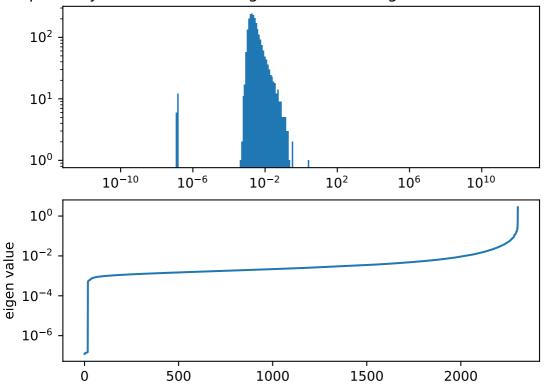


ep: 66 layer2.1.conv1 maxeig: 9.3e+00 mineig: 4.5e-05 con: 2.1e+05  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$ 10-2 10<sup>6</sup> 10<sup>2</sup>  $10^{1}$ eigen value 10<sup>-3</sup> 200 400 600 800 1000 1200

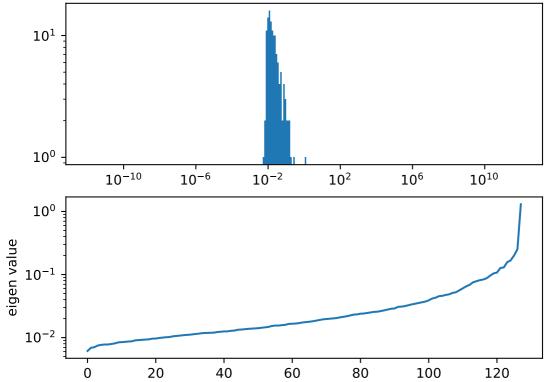
ep: 66 layer2.1.conv2 maxeig: 5.6e-01 mineig: 6.3e-05 con: 8.8e+03 10<sup>2</sup>  $10^{1}$ 10<sup>0</sup> 1010 10<sup>-10</sup> 10-2 10<sup>6</sup>  $10^{-6}$ 10<sup>2</sup>  $10^{-1}$ eigen value 10 -3  $10^{-4}$ 200 400 600 800 1000 1200

ep: 66 layer3.0.conv1 maxeig: 9.7e+00 mineig: 1.2e-03 con: 8.1e+03  $10^{2}$ 10<sup>1</sup>  $10^{0}$ 1010 10-10 10<sup>6</sup>  $10^{-6}$  $10^{-2}$ 10<sup>2</sup>  $10^{1}$ 10<sup>0</sup> eigen value  $10^{-1}$  $10^{-2}$ 10<sup>-3</sup> 200 400 600 800 1000 1200

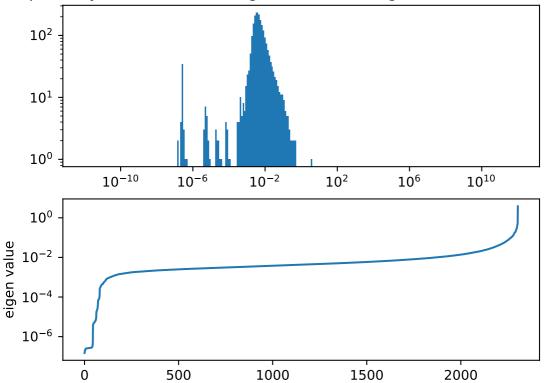
ep: 66 layer3.0.conv2 maxeig: 2.8e+00 mineig: 1.2e-07 con: 2.3e+07



ep: 66 layer3.0.shortcut.0 maxeig: 1.3e+00 mineig: 6.1e-03 con: 2.1e+02



ep: 66 layer3.1.conv1 maxeig: 3.8e+00 mineig: 1.5e-07 con: 2.5e+07



ep: 66 layer3.1.conv2 maxeig: 6.8e-01 mineig: 1.3e-07 con: 5.4e+06  $10^{2}$  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup> 10<sup>0</sup>  $10^{-2}$  $10^{-4}$  $10^{-6}$ 

1000

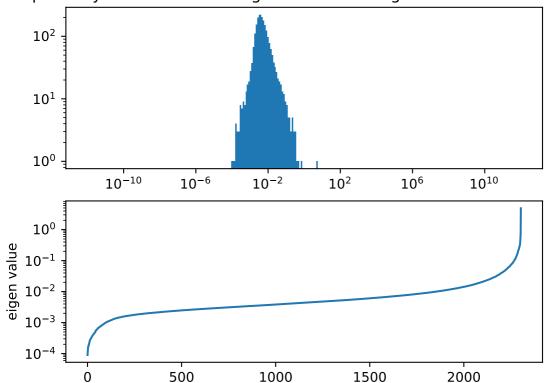
1500

2000

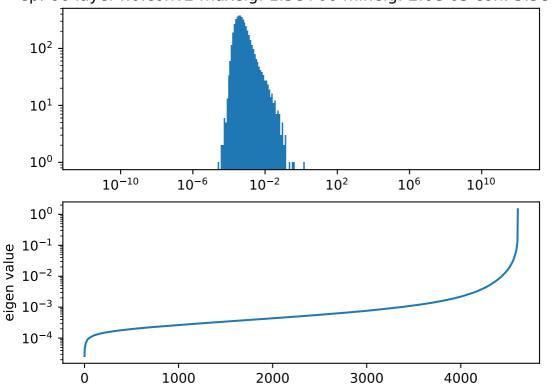
500

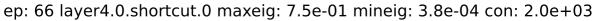
eigen value

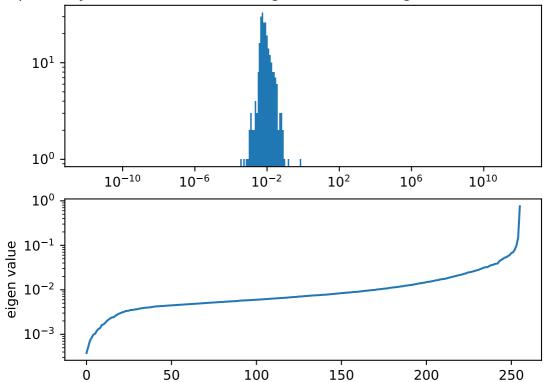
ep: 66 layer4.0.conv1 maxeig: 4.9e+00 mineig: 9.1e-05 con: 5.4e+04



ep: 66 layer4.0.conv2 maxeig: 1.5e+00 mineig: 2.6e-05 con: 5.5e+04







ep: 66 layer4.1.conv1 maxeig: 4.9e+00 mineig: 4.1e-07 con: 1.2e+07

