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## To Reviewers 1, 3 and 4 for Results on Normal Training

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Sec. 3.2 has stated  $\|\mathbf{A}\|_* = \|\boldsymbol{\sigma} \circ \boldsymbol{\sigma} - \mathbf{1}\|_1$  allows larger singular values for dominant singular vectors of  $\mathbf{W} \in \mathbb{R}^{m \times n}$ . This advantage holds when  $\mathbf{W}$  in  $\mathbf{A}$  is initialized with  $\mathbf{W}$ 's singular values  $\boldsymbol{\sigma}$  being larger than 1. In the originally submitted paper and Github code, only WideResNet28-10 initializes the convolutional layer  $\mathbf{W}$  with scaled Gaussian values  $\mathcal{N}(0, \sqrt{2/m})$  to make  $\mathbf{W}^T \mathbf{W} \approx 2\mathbf{I}_n$  so that  $\boldsymbol{\sigma} \approx \sqrt{2} > 1$  in the beginning of the training. However, the other two networks still initialize  $\mathbf{W}$  by standard Gaussian values, i.e., "Kaiming's normal", with  $\mathbf{W}^T \mathbf{W} \approx \mathbf{I}_n$ , and we had no enough time to change such weak initialization before the paper submission deadline. Now, we have **only** improved their initialization from the default "Kaiming's normal" to  $\mathcal{N}(0, \sqrt{2/m})$ , making  $\mathbf{W}^T \mathbf{W} \approx 2\mathbf{I}_n$ . Below, we show the improved results on the normal training, which becomes better than or comparable with the counterparts.

Table 1. Comparisons of top-1 error rate (%) with ResNet 110, Wide ResNet 28-10, and ResNext 29-8-64 on CIFAR10 and CIFAR100 under the normal training process.

Model	Regu.	CIFAR10	CIFAR100
ResNet-110	None	7.04	25.42
	FO	6.78	25.01
	MC	6.97	25.43
	SRIP	6.55	25.14
	Ours	<b>6.50</b>	<b>24.98</b>
Wide ResNet 28-10	None	4.16	20.55
	FO	3.76	18.56
	MC	3.68	18.90
	SRIP	3.60	18.19
	Ours	<b>3.47</b>	<b>18.17</b>
ResNext 29-8-64	None	3.70	18.53
	FO	3.58	17.59
	MC	3.65	17.62
	SRIP	<b>3.48</b>	16.99
	Ours	3.49	<b>16.95</b>