

Table 1

Dataset			OSSN	RKO	SVCM	BCOP
MNIST	Small	Clean	$96.86 \pm 0.13$	$97.28 \pm 0.08$	$97.24 \pm 0.09$	<b><math>97.54 \pm 0.06</math></b>
		Robust	$42.95 \pm 1.09$	$43.58 \pm 0.44$	$28.94 \pm 1.58$	<b><math>45.84 \pm 0.90</math></b>
	Large	Clean	$98.31 \pm 0.03$	$98.44 \pm 0.05$	$97.93 \pm 0.05$	<b><math>98.77 \pm 0.05</math></b>
		Robust	$53.77 \pm 1.02$	$55.18 \pm 0.46$	$38.00 \pm 1.82$	<b><math>56.66 \pm 0.23</math></b>
CIFAR10	Small	Clean	$62.18 \pm 0.66$	$61.77 \pm 0.63$	$62.39 \pm 0.46$	<b><math>64.53 \pm 0.30</math></b>
		Robust	$48.03 \pm 0.54$	$47.46 \pm 0.53$	$47.59 \pm 0.56$	<b><math>50.01 \pm 0.21</math></b>
	Large	Clean	$67.51 \pm 0.47$	$70.01 \pm 0.26$	$69.65 \pm 0.38$	<b><math>72.41 \pm 0.22</math></b>
		Robust	$53.64 \pm 0.49$	$55.76 \pm 0.16$	$53.61 \pm 0.51$	<b><math>58.72 \pm 0.23</math></b>

Table 2

Dataset		BCOP-Large	FC-3	KW-Large	KW-Resnet
MNIST	Clean	<b><math>98.77 \pm 0.05</math></b>	$98.71 \pm 0.02$	-	-
	Robust	<b><math>56.66 \pm 0.23</math></b>	$54.46 \pm 0.30$	-	-
CIFAR10	Clean	<b><math>72.41 \pm 0.22</math></b>	$62.60 \pm 0.39$	-	-
	Robust	<b><math>58.72 \pm 0.23</math></b>	$49.97 \pm 0.35$	-	-

**Table 3**

	KW	BCOP
Small		
Clean	54.39	<b>64.53</b> $\pm$ 0.30
PGD	49.94	<b>51.26</b> $\pm$ 0.17
FGSM	49.98	<b>51.57</b> $\pm$ 0.18
Large		
Clean	60.14	<b>72.41</b> $\pm$ 0.22
PGD	55.53	<b>64.39</b> $\pm$ 0.26
FGSM	55.55	<b>64.53</b> $\pm$ 0.25

	KW	BCOP
Small		
Clean (*)	63.00	<b>74.20</b> $\pm$ 2.23
BA (*)	60.00	<b>61.20</b> $\pm$ 2.99
PA (*)	63.00	<b>74.00</b> $\pm$ 2.28
Large		
Clean (*)	68.00	<b>77.60</b> $\pm$ 1.74
BA (*)	64.00	<b>71.20</b> $\pm$ 1.60
PA (*)	68.00	<b>77.20</b> $\pm$ 1.60

**Table 4a-Maxmin-lr-0.0001**

		OSSN	RKO	BCOP
Wasserstein Distance (STL-10)	MaxMin	7.39 $\pm$ 0.31	8.95 $\pm$ 0.12	<b>9.91</b> $\pm$ 0.11

**Table 4a-ReLU-lr-0.001**

		OSSN	RKO	BCOP
Wasserstein Distance (STL-10)	ReLU	7.06 $\pm$ 0.72	7.82 $\pm$ 0.21	<b>8.28</b> $\pm$ 0.19

Table 4b-Maxmin-lr-0.0001

		OSSN	RKO	BCOP
Wasserstein Distance (CIFAR-10)	MaxMin	$3.29 \pm 0.05$	$4.95 \pm 0.08$	<b><math>5.34 \pm 0.07</math></b>

Table 4b-ReLU-lr-0.001

		OSSN	RKO	BCOP
Wasserstein Distance (CIFAR-10)	ReLU	$3.07 \pm 0.12$	$4.20 \pm 0.06$	<b><math>4.39 \pm 0.07</math></b>

Table 7

Dataset			BCOP-Fixed	RK-L2NE	BCOP
MNIST	Small	Clean	$93.57 \pm 0.17$	$95.85 \pm 0.12$	<b><math>97.54 \pm 0.06</math></b>
		Robust	$7.51 \pm 1.18$	$39.77 \pm 0.73$	<b><math>45.84 \pm 0.90</math></b>
	Large	Clean	$65.20 \pm 3.94$	$96.76 \pm 0.11$	<b><math>98.77 \pm 0.05</math></b>
		Robust	$0.00 \pm 0.00$	$37.79 \pm 1.21$	<b><math>56.66 \pm 0.23</math></b>
CIFAR10	Small	Clean	$50.61 \pm 0.65$	$58.82 \pm 0.67$	<b><math>64.53 \pm 0.30</math></b>
		Robust	$36.44 \pm 0.70$	$44.65 \pm 0.61$	<b><math>50.01 \pm 0.21</math></b>
	Large	Clean	$47.14 \pm 0.38$	$56.75 \pm 0.68$	<b><math>72.41 \pm 0.22</math></b>
		Robust	$27.43 \pm 1.26$	$43.40 \pm 0.46$	<b><math>58.72 \pm 0.23</math></b>

Table 8

Dataset		BCOP-Large	FC-3	MMR-Universal
MNIST	Clean	<b>98.77</b> $\pm$ 0.05	98.71 $\pm$ 0.02	-
	Robust	<b>97.11</b> $\pm$ 0.07	97.06 $\pm$ 0.02	-
CIFAR10	Clean	<b>72.41</b> $\pm$ 0.22	62.60 $\pm$ 0.39	-
	Robust	<b>62.97</b> $\pm$ 0.30	53.67 $\pm$ 0.29	-

Table 9

Dataset		BCOP-Large	FC-3	QW-3	QW-4
MNIST	Clean	<b>98.77</b> $\pm$ 0.05	98.71 $\pm$ 0.02	98.65	98.23
	Robust	<b>56.66</b> $\pm$ 0.23	54.46 $\pm$ 0.30	42.13	27.59
	PGD	86.86 $\pm$ 0.25	81.96 $\pm$ 0.16	<b>86.86</b>	86.25
	FGSM	<b>86.93</b> $\pm$ 0.20	83.64 $\pm$ 0.10	85.83	84.17
CIFAR10	Clean	72.41 $\pm$ 0.22	62.60 $\pm$ 0.39	<b>79.15</b>	77.15
	Robust	<b>58.72</b> $\pm$ 0.23	49.97 $\pm$ 0.35	44.46	31.41
	PGD	64.39 $\pm$ 0.26	50.05 $\pm$ 0.36	<b>72.07</b>	71.89
	FGSM	64.53 $\pm$ 0.25	50.21 $\pm$ 0.34	<b>72.11</b>	71.92