Wide ResNet 50 Bottle

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
|---------|-----|-------|--------|--------------|-------|--------|-------------|--------|--|--|
| | I-A | 99.92 | 100 | 100 | 73.33 | 79.13 | 87.62 | 82.78 | | |
| Dadina | I-F | 99.21 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | | |
| Padim | P-A | 98.29 | 97.69 | 97.53 | 58.06 | 72.87 | 79.96 | 73.19 | | |
| | P-F | 72.12 | 53.20 | 48.23 | 14.87 | 13.79 | 14.56 | 14.91 | | |
| | | | | | | | | | | |
| | I-A | 100 | 100 | 100 | 89.99 | 91.90 | 96.83 | 96.27 | | |
| Patch | I-F | 100 | 87.5 | 86.30 | 86.30 | 86.30 | 86.30 | 86.30 | | |
| core | P-A | 98.09 | 96.24 | 97.62 | 85.10 | 92.77 | 96.24 | 93.44 | | |
| | P-F | 68.77 | 64.79 | 67.37 | 21.17 | 30.31 | 48.97 | 38.32 | | |
| | | | | | | | | | | |
| | I-A | 100 | 98.41 | 98.02 | 79.36 | 95.32 | 98.49 | 97.14 | | |
| STFPM | I-F | 96.72 | 91.37 | 90.43 | 86.30 | 87.32 | 96.72 | 96.72 | | |
| SIFFINI | P-A | 97.73 | 97.11 | 96.99 | 67.27 | 87.88 | 95.84 | 92.70 | | |
| | P-F | 64.57 | 63.77 | 63.22 | 14.37 | 30.02 | 65.96 | 43.96 | | |
| | | | | | | | | | | |
| | I-A | 99.60 | 97.38 | 95.08 | 37.62 | 73.02 | 49.76 | 32.53 | | |
| CFlow | I-F | 98.41 | 90.43 | 81.13 | 86.30 | 86.30 | 84.72 | 86.30 | | |
| CITOW | P-A | 97.70 | 96.31 | 95.74 | 76.58 | 78.93 | 86.44 | 83.36 | | |
| | P-F | 39.40 | 47.69 | 54.72 | 20.91 | 22.98 | 30.76 | 27.72 | | |
| | | | | | | | | | | |
| DFM | I-A | 98.09 | 87.22 | 89.13 | 76.51 | 59.17 | 73.49 | 65.08 | | |
| J | I-F | 34.21 | 85.96 | 87.50 | 85.52 | 86.30 | 86.30 | 86.30 | | |
| | | T | T | T | | T | , | | | |
| DFKDE | I-A | 53.96 | 49.21 | 48.41 | 50.91 | 49.21 | 48.06 | 43.65 | | |
| | I-F | 6.15 | 86.30 | 86.30 | 85.31 | 86.30 | 86.30 | 86.30 | | |
| | | T | Г | | | Г | | | | |
| Ours - | I-A | 98.25 | 88.08 | 86.83 | 90.95 | 95.56 | 97.78 | 96.35 | | |
| | I-F | 96.83 | 89.36 | 86.90 | 86.30 | 92.19 | 93.02 | 87.50 | | |
| 3.10 | P-A | 96.78 | 92.26 | 90.98 | 74.86 | 88.91 | 89.56 | 87.75 | | |
| | P-F | 63.08 | 44.61 | 43.39 | 33.59 | 54.04 | 54.72 | 54.54 | | |

Wide ResNet 50 Cable

| | | | | | _ | Ī | T | | | |
|---------------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|
| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
| | I-A | 91.62 | 91.63 | 77.87 | 94.12 | 92.36 | 92.52 | 91.87 | | |
| Padim - | I-F | 88.67 | 87.38 | 76.03 | 89.12 | 86.91 | 87.63 | 87.37 | | |
| raullii [| P-A | 97.59 | 97.53 | 96.39 | 97.48 | 97.48 | 97.34 | 97.39 | | |
| | P-F | 54.70 | 54.07 | 39.83 | 55.24 | 54.87 | 53.68 | 55.00 | | |
| | | | | | | | | | | |
| | I-A | 98.14 | 96.83 | 86.60 | 97.41 | 98.03 | 97.41 | 98.09 | | |
| Patch | I-F | 95.56 | 91.28 | 76.03 | 93.12 | 94.56 | 92.71 | 94.12 | | |
| core | P-A | 98.43 | 98.30 | 97.35 | 98.06 | 98.37 | 98.08 | 98.23 | | |
| | P-F | 64.27 | 62.77 | 41.86 | 62.63 | 64.04 | 61.04 | 62.59 | | |
| | | | | | | | | | | |
| | I-A | 89.82 | 88.89 | 63.09 | 88.94 | 89.39 | 91.66 | 90.85 | | |
| CTEDA4 | I-F | 87.09 | 85.56 | 76.35 | 83.43 | 88.04 | 87.70 | 88.64 | | |
| STFPM | P-A | 95.48 | 95.21 | 93.23 | 93.56 | 94.85 | 93.97 | 94.48 | | |
| | P-F | 59.85 | 54.95 | 32.12 | 55.68 | 58.90 | 55.37 | 58.20 | | |
| | | | | | | | | | | |
| | I-A | 93.10 | 92.97 | 82.30 | 89.75 | 93.59 | 84.67 | 88.31 | | |
| CELS | I-F | 86.70 | 89.94 | 77.63 | 84.62 | 88.69 | 80.20 | 85.18 | | |
| CFlow | P-A | 95.75 | 96.07 | 93.46 | 94.68 | 95.95 | 94.16 | 95.64 | | |
| | P-F | 47.11 | 49.50 | 36.20 | 43.84 | 47.47 | 42.89 | 50.39 | | |
| | | | | | | | | | | |
| DFM | I-A | 90.44 | 90.42 | 76.33 | 83.94 | 90.44 | 86.75 | 87.95 | | |
| DEIVI | I-F | 75.16 | 40.00 | 76.67 | 77.25 | 75.16 | 81.82 | 88.54 | | |
| | | | | | | | | | | |
| DFKDE | I-A | 76.62 | 65.22 | 40.93 | 66.87 | 69.73 | 66.09 | 63.39 | | |
| PLKDE | I-F | 75.51 | 76.92 | 76.03 | 75.86 | 77.31 | 75.83 | 76.34 | | |
| _ | | | | | | | | | | |
| | I-A | 90.84 | 90.21 | 79.65 | 93.73 | 91.03 | 91.80 | 92.88 | | |
| Ours | I-F | 88.06 | 85.68 | 80.39 | 89.14 | 86.18 | 87.54 | 87.53 | | |
| Ours | P-A | 97.96 | 97.56 | 96.65 | 97.91 | 97.34 | 97.90 | 97.14 | | |
| | P-F | 54.23 | 53.15 | 43.99 | 54.38 | 53.35 | 52.25 | 54.45 | | |
| | | | | | | | | | | |

Wide ResNet 50 Capsule

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N |
|-------|-----|----------|--------|--------|----------|----------|---------|--------|
| | I-A | 90.43 | 90.63 | 81.53 | 68.73 | 71.48 | 65.66 | 63.02 |
| | I-F | 96.40 | 94.27 | 90.46 | 90.46 | 90.46 | 90.46 | 90.46 |
| Padim | P-A | 98.44 | 97.68 | 97.30 | 80.75 | 96.82 | 95.53 | 94.74 |
| | P-F | 48.24 | 47.85 | 39.88 | 02.22 | 20.78 | 07.18 | 09.45 |
| | • • | | | 20.00 | | | J. 1.10 | 23.70 |
| | I-A | 97.32 | 95.45 | 76.22 | 72.35 | 81.77 | 76.47 | 66.21 |
| Patch | I-F | 96.39 | 95.54 | 90.45 | 90.45 | 90.45 | 90.46 | 90.46 |
| core | P-A | 98.64 | 98.18 | 96.93 | 84.64 | 96.99 | 94.81 | 94.78 |
| | P-F | 49.43 | 48.69 | 26.47 | 2.68 | 23.77 | 9.49 | 11.29 |
| | i | <u> </u> | 1 | ı | ! | <u> </u> | | |
| | I-A | 54.78 | 52.58 | 61.71 | 49.06 | 64.74 | 63.70 | 62.03 |
| CTED: | I-F | 90.87 | 86.48 | 69.99 | 90.45 | 80.40 | 86.64 | 90.76 |
| STFPM | P-A | 94.47 | 93.99 | 94.93 | 69.55 | 95.16 | 93.41 | 92.49 |
| | P-F | 16.58 | 15.56 | 24.31 | 3.28 | 21.98 | 12.14 | 11.04 |
| | | | | | | | | |
| | I-A | 83.07 | 93.67 | 49.95 | 35.04 | 59.17 | 58.22 | 69.54 |
| CFlow | I-F | 90.28 | 90.87 | 90.82 | 80.46 | 90.46 | 90.46 | 91.45 |
| CLIOM | P-A | 98.89 | 97.45 | 92.42 | 82.07 | 96.18 | 92.07 | 93.71 |
| | P-F | 15.48 | 17.72 | 19.26 | 14.27 | 15.06 | 17.69 | 19.42 |
| | | | | | | | | |
| DFM | I-A | 91.50 | 64.49 | 48.62 | 57.36 | 63.74 | 52.49 | 57.04 |
| 2.141 | I-F | 19.83 | 52.29 | 90.46 | 90.46 | 61.08 | 90.46 | 90.83 |
| - | | · | Г | · | | Г | | |
| DFKDE | I-A | 84.36 | 67.75 | 48.17 | 63.54 | 72.39 | 56.32 | 57.59 |
| | I-F | 84.10 | 90.46 | 90.46 | 90.46 | 90.46 | 90.46 | 90.46 |
| 1 | | | | | | | | |
| | I-A | 90.95 | 90.91 | 79.53 | 72.68 | 73.75 | 66.64 | 63.76 |
| Ours | I-F | 95.50 | 93.98 | 90.46 | 90.46 | 90.46 | 90.46 | 90.46 |
| | P-A | 98.95 | 97.90 | 97.22 | 83.81 | 96.72 | 95.23 | 94.12 |
| | P-F | 49.06 | 47.06 | 31.34 | 02.25 | 18.11 | 06.95 | 09.12 |

Wide ResNet 50 Carpet

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | |
|-----------|-----|-------|--------|--------|-------|--------|---------|--------|--|
| | I-A | 98.19 | 99.64 | 99.04 | 98.03 | 98.39 | 98.52 | 97.63 | |
| D a alima | I-F | 97.75 | 96.17 | 86.41 | 97.18 | 96.63 | 93.05 | 96.09 | |
| Padim | P-A | 98.47 | 98.83 | 98.22 | 98.62 | 98.57 | 98.40 | 98.58 | |
| | P-F | 54.42 | 54.66 | 27.36 | 55.09 | 54.24 | 53.52 | 54.12 | |
| | | | | | | | | | |
| | I-A | 96.55 | 98.43 | 97.35 | 97.83 | 97.19 | 98.47 | 97.27 | |
| Patch | I-F | 95.35 | 95.60 | 86.41 | 97.14 | 96.55 | 96.00 | 95.59 | |
| core | P-A | 98.62 | 98.66 | 97.60 | 98.58 | 98.66 | 98.53 | 98.54 | |
| | P-F | 55.26 | 53.52 | 4.59 | 55.49 | 55.35 | 53.94 | 54.45 | |
| | | | | | | | | | |
| | I-A | 98.19 | 99.71 | 50.19 | 99.31 | 99.87 | 98.54 | 99.03 | |
| STFPM | I-F | 92.05 | 98.77 | 68.41 | 95.44 | 94.12 | 95.79 | 96.05 | |
| SIFFIVI | P-A | 99.45 | 99.75 | 35.45 | 99.52 | 99.49 | 99.19 | 99.28 | |
| | P-F | 68.62 | 59.17 | 3.32 | 68.96 | 68.82 | 67.62 | 67.28 | |
| | | | | | | | | | |
| | I-A | 90.67 | 98.47 | 89.62 | 96.11 | 94.35 | 95.15 | 94.79 | |
| CFlow | I-F | 87.60 | 91.60 | 88.41 | 90.12 | 90.60 | 87.62 | 92.67 | |
| CFIOW | P-A | 97.96 | 98.56 | 93.24 | 98.62 | 98.81 | 98.56 | 97.77 | |
| | P-F | 52.82 | 59.27 | 13.78 | 56.59 | 55.45 | 54.44 | 51.06 | |
| | | | | | | | | | |
| DFM | I-A | 90.97 | 85.71 | 70.75 | 97.43 | 96.75 | 95.83 | 97.19 | |
| DITIVI | I-F | 89.39 | 87.00 | 86.41 | 94.74 | 94.05 | 94.38 | 95.95 | |
| | | _ | | | | | | | |
| DFKDE | I-A | 55.56 | 46.07 | 50.00 | 76.57 | 69.90 | 72.69 | 69.46 | |
| DINDE | I-F | 44.79 | 82.99 | 86.41 | 87.37 | 78.82 | 87.13 | 87.05 | |
| | | T | | | | T | , , | | |
| | I-A | 98.05 | 99.23 | 97.20 | 98.30 | 98.38 | 98.01 | 98.37 | |
| Ours | I-F | 95.05 | 98.75 | 86.41 | 95.93 | 95.11 | 95.78 | 96.51 | |
| 3 2 0 | P-A | 98.42 | 98.46 | 98.00 | 98.45 | 98.59 | 98.06 | 98.90 | |
| | P-F | 53.48 | 53.28 | 03.16 | 55.97 | 57.56 | 54.33 | 54.50 | |

Wide ResNet 50 Grid

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | | |
|-------------|-----|--------------|--------|--------------|-------|--------------|--------------|--------|--|--|--|
| | I-A | 95.32 | 97.08 | 80.37 | 82.37 | 80.87 | 74.60 | 87.80 | | | |
| D 1: | I-F | 92.86 | 92.59 | 86.36 | 84.44 | 84.62 | 84.44 | 86.15 | | | |
| Padim | P-A | 95.75 | 96.59 | 85.83 | 90.88 | 94.96 | 93.04 | 94.64 | | | |
| | P-F | 32.28 | 32.07 | 04.83 | 15.94 | 28.07 | 20.92 | 30.19 | | | |
| | | | | | | | | | | | |
| | I-A | 93.81 | 87.47 | 57.60 | 69.67 | 78.45 | 65.83 | 76.86 | | | |
| Patch | I-F | 91.59 | 86.79 | 84.44 | 85.07 | 83.20 | 84.44 | 84.44 | | | |
| core | P-A | 95.32 | 91.38 | 74.75 | 76.56 | 92.29 | 88.06 | 91.25 | | | |
| | P-F | 23.23 | 24.07 | 2.68 | 3.72 | 23.69 | 19.34 | 26.04 | | | |
| | | | | | | | | | | | |
| | I-A | 97.57 | 95.73 | 94.53 | 93.89 | 95.65 | 91.06 | 93.32 | | | |
| STFPM | I-F | 89.46 | 86.23 | 90.44 | 91.82 | 88.45 | 90.69 | 89.42 | | | |
| SIFFINI | P-A | 98.92 | 98.63 | 95.07 | 96.04 | 98.17 | 98.24 | 98.20 | | | |
| | P-F | 49.35 | 48.11 | 6.43 | 29.94 | 48.69 | 42.40 | 47.26 | | | |
| | | | | | | | | | | | |
| | I-A | 86.82 | 75.32 | 55.09 | 74.42 | 63.41 | 70.52 | 60.22 | | | |
| CFlow | I-F | 84.36 | 85.02 | 84.44 | 84.44 | 83.44 | 84.44 | 84.44 | | | |
| CFIOW | P-A | 92.96 | 90.39 | 75.23 | 73.31 | 86.35 | 81.69 | 84.71 | | | |
| | P-F | 26.36 | 24.80 | 11.39 | 4.26 | 17.42 | 10.17 | 15.38 | | | |
| | | | | | | | | | | | |
| DFM | I-A | 47.37 | 38.59 | 55.76 | 49.71 | 47.91 | 52.96 | 48.29 | | | |
| DITIVI | I-F | 9.99 | 58.59 | 84.44 | 84.44 | 82.17 | 84.44 | 84.44 | | | |
| | | , | | , | | , | , | | | | |
| DFKDE | I-A | 39.01 | 36.93 | 53.09 | 55.01 | 47.08 | 51.04 | 45.78 | | | |
| DIKE | I-F | 6.67 | 65.42 | 84.44 | 85.07 | 83.97 | 84.44 | 85.07 | | | |
| | | | | | | | | | | | |
| | I-A | 95.99 | 98.97 | 89.15 | 93.85 | 91.97 | 89.30 | 93.47 | | | |
| Ours | I-F | 86.37 | 94.14 | 90.32 | 89.16 | 91.93 | 85.18 | 90.76 | | | |
| Ours | P-A | 96.08 | 97.24 | 90.73 | 93.74 | 96.41 | 94.93 | 96.02 | | | |
| | P-F | 27.51 | 28.08 | 10.11 | 24.69 | 27.20 | 26.18 | 28.86 | | | |

Wide ResNet 50 Haze-Nut

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|--|
| | I-A | 98.64 | 97.61 | 98.47 | 98.64 | 99.07 | 97.57 | 97.46 | | | |
| Dodina | I-F | 97.18 | 95.17 | 95.10 | 94.11 | 94.81 | 94.81 | 93.23 | | | |
| Padim | P-A | 98.60 | 98.42 | 98.33 | 98.47 | 98.25 | 97.39 | 97.35 | | | |
| | P-F | 59.52 | 57.90 | 57.90 | 59.74 | 60.01 | 60.07 | 59.43 | | | |
| | | | | | | | | | | | |
| | I-A | 100 | 99.93 | 99.04 | 100 | 100 | 100 | 99.96 | | | |
| Patch | I-F | 100 | 98.59 | 79.54 | 97.90 | 99.29 | 96.55 | 99.29 | | | |
| core | P-A | 98.62 | 98.55 | 98.34 | 98.17 | 98.16 | 97.85 | 97.95 | | | |
| | P-F | 58.76 | 58.02 | 50.13 | 55.27 | 55.39 | 53.02 | 53.98 | | | |
| | | | | | | | | | | | |
| | I-A | 96.24 | 95.07 | 95.46 | 97.75 | 95.96 | 96.46 | 97.24 | | | |
| STFPM | I-F | 92.61 | 92.89 | 80.97 | 88.02 | 91.17 | 87.05 | 87.77 | | | |
| SIFFINI | P-A | 97.19 | 97.03 | 97.97 | 97.22 | 97.90 | 97.45 | 96.91 | | | |
| | P-F | 52.56 | 51.92 | 52.55 | 55.29 | 52.38 | 52.54 | 50.72 | | | |
| | | | | | | | | | | | |
| | I-A | 100 | 98.64 | 99.43 | 94.50 | 97.96 | 96.53 | 93.25 | | | |
| CFlow | I-F | 77.78 | 77.78 | 87.50 | 89.78 | 73.79 | 58.78 | 65.78 | | | |
| CFIOW | P-A | 98.40 | 98.15 | 98.46 | 98.22 | 96.19 | 95.14 | 97.97 | | | |
| | P-F | 27.94 | 26.39 | 37.41 | 58.91 | 24.99 | 12.51 | 15.85 | | | |
| | | | | | | | | | | | |
| DFM | I-A | 96.21 | 85.82 | 66.68 | 74.03 | 85.24 | 84.42 | 85.14 | | | |
| DITIVI | I-F | 35.21 | 35.29 | 51.48 | 75.18 | 70.27 | 84.35 | 84.51 | | | |
| | | | | | | | | | | | |
| DFKDE | I-A | 73.82 | 68.92 | 66.57 | 64.07 | 71.75 | 67.39 | 67.21 | | | |
| DIKDL | I-F | 61.11 | 69.12 | 76.13 | 75.73 | 73.38 | 75.90 | 78.78 | | | |
| | | | | | | | | | | | |
| | I-A | 96.18 | 94.86 | 86.54 | 96.46 | 95.72 | 95.86 | 92.54 | | | |
| Ours | I-F | 94.12 | 90.61 | 82.34 | 92.61 | 94.73 | 92.54 | 92.97 | | | |
| Curs | P-A | 98.51 | 98.97 | 97.68 | 98.69 | 98.35 | 98.22 | 94.42 | | | |
| | P-F | 64.82 | 64.45 | 60.02 | 65.55 | 64.54 | 64.78 | 62.13 | | | |

Wide ResNet 50 Leather

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|
| | I-A | 1 | 1 | 1 | 1 | 1 | 99.97 | 1 | | |
| Dealine | I-F | 1 | 1 | 1 | 99.45 | 99.45 | 99.45 | 1 | | |
| Padim | P-A | 99.01 | 98.96 | 99.11 | 98.99 | 99.04 | 99.04 | 99.00 | | |
| | P-F | 39.59 | 38.03 | 35.93 | 38.58 | 39.48 | 40.29 | 39.26 | | |
| | | | | | | | | | | |
| | I-A | 100 | 100 | 100 | 100 | 100 | 99.89 | 100 | | |
| Patch | I-F | 99.45 | 100 | 85.18 | 99.45 | 100 | 98.92 | 100 | | |
| core | P-A | 99.03 | 99.06 | 98.93 | 99.03 | 98.98 | 98.89 | 98.94 | | |
| | P-F | 40.76 | 36.55 | 15.95 | 40.03 | 40.10 | 39.41 | 40.04 | | |
| | | | | | | | | | | |
| | I-A | 99.08 | 100 | 99.35 | 99.76 | 99.36 | 99.09 | 99.88 | | |
| CTEDNA | I-F | 97.08 | 98.91 | 85.79 | 97.62 | 98.92 | 97.65 | 98.71 | | |
| STFPM | P-A | 98.79 | 98.52 | 99.87 | 98.94 | 98.92 | 98.88 | 98.22 | | |
| | P-F | 30.95 | 33.18 | 18.53 | 42.73 | 31.64 | 29.08 | 29.32 | | |
| | | | | | | | | | | |
| | I-A | 99.42 | 99.59 | 74.32 | 97.69 | 99.93 | 98.91 | 99.78 | | |
| CFlow | I-F | 97.90 | 98/39 | 0 | 95.78 | 98.91 | 93.34 | 99.45 | | |
| CFIOW | P-A | 99.26 | 99.11 | 98.93 | 99.94 | 99.80 | 98.33 | 98.70 | | |
| | P-F | 40.98 | 45.39 | 0 | 52.40 | 52.73 | 27.81 | 38.23 | | |
| | | • | | | | | | | | |
| DFM | I-A | 99.11 | 94.87 | 87.50 | 95.85 | 97.18 | 93.54 | 96.73 | | |
| DITIVI | I-F | 66.67 | 87.80 | 85.18 | 81.29 | 89.15 | 89.47 | 95.13 | | |
| | | | | | | | | | | |
| DFKDE | I-A | 85.52 | 79.50 | 50.00 | 80.77 | 86.65 | 74.39 | 87.50 | | |
| DIKDL | I-F | 58.46 | 85.18 | 85.18 | 72.48 | 78.21 | 82.61 | 90.63 | | |
| | | | | | | | | | | |
| | I-A | 99.60 | 99.76 | 99.49 | 99.59 | 99.63 | 99.59 | 99.53 | | |
| Ours | I-F | 97.35 | 97.87 | 97.87 | 97.69 | 98.40 | 97.87 | 97.87 | | |
| Juis | P-A | 98.50 | 98.37 | 98.03 | 98.47 | 98.36 | 98.38 | 98.17 | | |
| | P-F | 45.96 | 44.90 | 43.26 | 44.77 | 45.44 | 45.95 | 45.58 | | |

Wide ResNet 50 Metal-Nut

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|
| | I-A | 99.36 | 99.56 | 90.18 | 97.99 | 95.60 | 86.61 | 79.86 | | |
| Dodina | I-F | 98.39 | 95.88 | 89.42 | 95.87 | 89.42 | 89.42 | 89.42 | | |
| Padim | P-A | 98.37 | 97.98 | 95.76 | 97.07 | 92.37 | 87.34 | 77.07 | | |
| | P-F | 82.53 | 79.70 | 45.95 | 76.45 | 32.36 | 24.33 | 24.63 | | |
| | | | | | | | | | | |
| | I-A | 99.56 | 98.92 | 90.86 | 98.28 | 88.56 | 77.71 | 71.55 | | |
| Patch | I-F | 98.91 | 95.83 | 89.42 | 96.29 | 89.42 | 89.42 | 89.42 | | |
| core | P-A | 98.55 | 98.17 | 96.27 | 97.72 | 96.58 | 95.80 | 92.75 | | |
| | P-F | 82.08 | 81.55 | 55.03 | 78.51 | 72.90 | 63.45 | 51.44 | | |
| | | | | | | | | | | |
| | I-A | 67.01 | 70.28 | 80.96 | 73.77 | 59.80 | 65.21 | 70.52 | | |
| STFPM | I-F | 89.22 | 86.28 | 86.75 | 86.41 | 87.23 | 87.01 | 89.85 | | |
| SIFFINI | P-A | 95.01 | 91.65 | 91.80 | 92.13 | 81.45 | 79.64 | 62.74 | | |
| | P-F | 67.02 | 47.20 | 47.08 | 59.68 | 34.78 | 29.07 | 24.05 | | |
| | | | | | | | | | | |
| | I-A | 97.87 | 93.89 | 94.36 | 80.48 | 58.93 | 27.71 | 40.87 | | |
| CFlow | I-F | 89.42 | 89.29 | 89.42 | 89.09 | 89.71 | 89.83 | 89.85 | | |
| CFIOW | P-A | 96.69 | 95.54 | 87.29 | 87.61 | 70.66 | 54.90 | 60.99 | | |
| | P-F | 24.69 | 24.64 | 23.28 | 21.52 | 25.32 | 20.70 | 24.79 | | |
| | | | | | | | | | | |
| DFM | I-A | 87.43 | 76.44 | 56.06 | 79.61 | 80.00 | 76.24 | 78.93 | | |
| Dilvi | I-F | 39.65 | 39.65 | 88.78 | 32.43 | 53.54 | 88.08 | 90.62 | | |
| | | | | | | | , | | | |
| DFKDE | I-A | 61.04 | 64.17 | 54.20 | 55.08 | 45.72 | 48.97 | 51.29 | | |
| DINDL | I-F | 39.65 | 85.85 | 89.42 | 88.78 | 89.42 | 89.42 | 89.42 | | |
| | | | | | | | | | | |
| | I-A | 99.56 | 99.02 | 97.10 | 99.56 | 99.51 | 98.72 | 97.72 | | |
| Ours | I-F | 97.10 | 96.18 | 86.42 | 96.10 | 97.42 | 95.42 | 94.42 | | |
| | P-A | 98.24 | 98.93 | 98.14 | 98.25 | 98.66 | 98.00 | 97.52 | | |
| | P-F | 60.73 | 59.40 | 57.26 | 60.72 | 61.51 | 60.75 | 60.48 | | |

Wide ResNet 50 Pill

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|--|
| | I-A | 96.59 | 95.09 | 81.99 | 69.55 | 72.91 | 77.08 | 52.75 | | | |
| Dedina | I-F | 54.63 | 55.38 | 47.31 | 84.47 | 57.71 | 73.36 | 91.55 | | | |
| Padim | P-A | 94.94 | 94.78 | 95.26 | 89.43 | 77.71 | 78.18 | 51.80 | | | |
| | P-F | 14.93 | 13.74 | 16.96 | 29.16 | 13.78 | 18.22 | 8.72 | | | |
| | | | | | | | | | | | |
| | I-A | 92.33 | 89.44 | 80.19 | 51.88 | 71.95 | 66.74 | 64.40 | | | |
| Patch | I-F | 73.21 | 75.11 | 83.00 | 91.55 | 88.81 | 91.55 | 91.55 | | | |
| core | P-A | 97.43 | 96.97 | 94.97 | 85.51 | 86.15 | 85.08 | 78.88 | | | |
| | P-F | 52.20 | 55.75 | 54.42 | 17.02 | 46.12 | 42.35 | 39.85 | | | |
| | | | | | | | | | | | |
| | I-A | 64.70 | 64.53 | 62.71 | 58.48 | 55.23 | 58.40 | 50.87 | | | |
| STFPM | I-F | 91.55 | 91.55 | 87.88 | 91.55 | 91.55 | 91.55 | 91.55 | | | |
| SIFFINI | P-A | 93.04 | 92.02 | 88.97 | 88.48 | 83.55 | 81.83 | 73.23 | | | |
| | P-F | 34.35 | 30.91 | 26.38 | 15.46 | 13.75 | 19.39 | 8.29 | | | |
| | | | | | | | | | | | |
| | I-A | 88.05 | 78.96 | 63.58 | 20.75 | 35.27 | 62.52 | 18.82 | | | |
| CFlow | I-F | 91.55 | 91.55 | 91.55 | 91.55 | 91.55 | 92.40 | 91.55 | | | |
| CFIOW | P-A | 97.41 | 96.73 | 94.07 | 81.49 | 71.39 | 71.13 | 60.49 | | | |
| | P-F | 15.12 | 14.36 | 13.13 | 12.53 | 12.33 | 13.45 | 7.87 | | | |
| | | | | | | | | | | | |
| DFM | I-A | 86.49 | 75.06 | 59.08 | 50.50 | 54.39 | 52.94 | 54.39 | | | |
| DIW | I-F | 11.99 | 11.99 | 90.13 | 91.55 | 90.78 | 91.85 | 90.13 | | | |
| | | | | | | | | | | | |
| DFKDE | I-A | 69.03 | 67.78 | 51.80 | 49.64 | 54.06 | 52.40 | 49.46 | | | |
| DFKDE | I-F | 15.68 | 61.68 | 91.55 | 91.55 | 90.49 | 90.49 | 91.85 | | | |
| | | | | | | | | | | | |
| | I-A | 94.94 | 91.27 | 82.79 | 65.51 | 77.62 | 77.20 | 66.54 | | | |
| Ours | I-F | 55.56 | 52.21 | 54.56 | 88.56 | 91.56 | 91.56 | 92.56 | | | |
| Curs | P-A | 95.84 | 95.74 | 88.53 | 87.78 | 88.77 | 71.28 | 57.38 | | | |
| | P-F | 42.40 | 37.63 | 40.27 | 19.29 | 34.35 | 13.57 | 07.87 | | | |

Wide ResNet 50 Screw

| | | | | | 1 | | T I | | | | |
|----------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|--|
| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | | |
| | I-A | 84.03 | 79.50 | 48.61 | 73.56 | 75.52 | 71.03 | 76.77 | | | |
| Padim - | I-F | 80.90 | 87.34 | 85.30 | 85.30 | 85.30 | 85.30 | 85.30 | | | |
| raulili | P-A | 98.72 | 98.34 | 86.86 | 92.21 | 97.75 | 97.41 | 97.44 | | | |
| | P-F | 30.13 | 27.81 | 6.97 | 3.47 | 19.14 | 10.34 | 18.24 | | | |
| | | | | | | | | | | | |
| | I-A | 94.85 | 81.34 | 46.75 | 70.40 | 84.30 | 69.01 | 78.35 | | | |
| Patch | I-F | 55.75 | 74.37 | 85.30 | 85.30 | 87.13 | 85.30 | 87.12 | | | |
| core | P-A | 99.16 | 98.27 | 96.02 | 94.60 | 97.46 | 96.79 | 97.47 | | | |
| | P-F | 18.67 | 19.51 | 4.64 | 4.28 | 31.78 | 17.49 | 28.56 | | | |
| L | _ | | | | _ | | | _ | | | |
| | I-A | 69.31 | 57.30 | 49.72 | 73.06 | 63.82 | 59.27 | 44.64 | | | |
| CTEDIA | I-F | 71.56 | 83.58 | 85.30 | 85.30 | 84.78 | 84.89 | 85.30 | | | |
| STFPM | P-A | 97.20 | 96.58 | 95.79 | 68.24 | 96.68 | 95.92 | 96.11 | | | |
| | P-F | 9.52 | 20.81 | 6.11 | 1.38 | 24.23 | 23.80 | 11.61 | | | |
| <u> </u> | | | | | | | | | | | |
| | I-A | 57.20 | 82.84 | 61.71 | 43.57 | 61.28 | 61.44 | 32.61 | | | |
| CEL- | I-F | 85.30 | 85.30 | 85.30 | 85.30 | 85.30 | 85.30 | 85.30 | | | |
| CFlow | P-A | 95.60 | 95.19 | 94.89 | 69.69 | 86.93 | 85.58 | 83.25 | | | |
| | P-F | 1.51 | 1.61 | 1.61 | 0.90 | 1.17 | 1.27 | 1.31 | | | |
| | | | | | | | | | | | |
| DEM | I-A | 70.64 | 40.43 | 49.28 | 50.00 | 32.81 | 30.90 | 33.51 | | | |
| DFM | I-F | 1.67 | 78.76 | 85.30 | 85.30 | 84.89 | 85.30 | 85.30 | | | |
| | | | | | | | | | | | |
| DENDE | I-A | 64.33 | 53.86 | 49.92 | 35.90 | 28.41 | 26.21 | 23.30 | | | |
| DFKDE - | I-F | 27.97 | 79.67 | 85.30 | 85.30 | 84.74 | 84.47 | 85.30 | | | |
| | | | | | | | | | | | |
| | I-A | 83.60 | 77.54 | 44.46 | 76.83 | 78.07 | 71.24 | 79.55 | | | |
| Ours | I-F | 77.90 | 86.72 | 85.30 | 85.30 | 86.67 | 85.30 | 88.86 | | | |
| Ours | P-A | 97.94 | 98.92 | 96.79 | 94.77 | 98.99 | 97.58 | 97.79 | | | |
| | P-F | 22.45 | 26.73 | 7.61 | 18.42 | 26.27 | 23.67 | 26.54 | | | |

Wide ResNet 50 Tile

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|--|
| | I-A | 99.53 | 98.48 | 97.61 | 98.59 | 99.81 | 99.60 | 99.53 | | | |
| Dealine | I-F | 97.07 | 93.71 | 83.58 | 92.30 | 96.00 | 92.30 | 97.67 | | | |
| Padim | P-A | 95.14 | 92.71 | 92.07 | 94.58 | 94.73 | 94.26 | 94.41 | | | |
| | P-F | 58.23 | 52.32 | 26.73 | 52.32 | 57.64 | 56.26 | 57.43 | | | |
| | | | | | | | | | | | |
| | I-A | 99.71 | 99.31 | 94.98 | 98.48 | 99.92 | 99.56 | 99.78 | | | |
| Patch | I-F | 98.24 | 93.85 | 83.58 | 96.47 | 98.80 | 97.64 | 98.80 | | | |
| core | P-A | 94.25 | 91.95 | 91.07 | 92.84 | 93.30 | 92.53 | 93.08 | | | |
| | P-F | 54.99 | 50.66 | 27.49 | 52.76 | 55.15 | 53.03 | 54.76 | | | |
| | | | | | | | | | | | |
| | I-A | 96.68 | 99.67 | 99.17 | 97.79 | 99.85 | 99.63 | 99.81 | | | |
| CTEDNA | I-F | 90.12 | 88.74 | 93.67 | 91.02 | 91.61 | 94.99 | 94.99 | | | |
| STFPM | P-A | 97.40 | 95.31 | 96.92 | 96.62 | 97.09 | 96.80 | 96.83 | | | |
| | P-F | 65.61 | 66.36 | 32.73 | 63.29 | 62.85 | 65.56 | 63.41 | | | |
| | | | | | | | | | | | |
| | I-A | 96.71 | 90.72 | 79.18 | 95.77 | 96.68 | 97.18 | 98.19 | | | |
| CFlow | I-F | 61.57 | 26.80 | 23.52 | 26.80 | 44.44 | 21.27 | 35.29 | | | |
| CFIOW | P-A | 92.72 | 86.18 | 76.86 | 83.95 | 88.64 | 87.61 | 88.97 | | | |
| | P-F | 5.70 | 1.46 | 0 | 1.28 | 2.08 | 1.33 | 0.83 | | | |
| | | | | | | | | | | | |
| DFM | I-A | 99.24 | 90.62 | 79.18 | 96.50 | 98.48 | 94.94 | 96.75 | | | |
| DITIVI | I-F | 98.80 | 83.58 | 83.58 | 83.58 | 84.84 | 83.58 | 83.58 | | | |
| | | | | | | | | | | | |
| DFKDE | I-A | 94.55 | 77.43 | 48.80 | 79.83 | 90.25 | 75.97 | 81.70 | | | |
| DIKDL | I-F | 72.72 | 83.24 | 83.58 | 80.95 | 86.62 | 81.91 | 87.49 | | | |
| | | | | | | | | | | | |
| | I-A | 99.97 | 98.55 | 99.82 | 98.59 | 99.54 | 99.14 | 98.39 | | | |
| Ours | I-F | 96.29 | 95.49 | 83.58 | 96.43 | 97.02 | 97.57 | 95.61 | | | |
| Juis | P-A | 95.26 | 91.51 | 91.07 | 95.63 | 95.38 | 94.75 | 94.49 | | | |
| | P-F | 60.59 | 55.47 | 17.94 | 60.20 | 58.97 | 58.88 | 60.20 | | | |

Wide ResNet 50 Toothbrush

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|--|
| | I-A | 92.22 | 93.33 | 95.83 | 86.38 | 94.72 | 98.89 | 88.33 | | |
| Dealine | I-F | 80.00 | 86.20 | 83.33 | 83.58 | 87.27 | 92.85 | 91.22 | | |
| Padim | P-A | 98.99 | 99.09 | 98.84 | 98.76 | 97.91 | 98.38 | 95.71 | | |
| | P-F | 60.11 | 62.02 | 57.02 | 62.47 | 60.74 | 61.54 | 58.58 | | |
| | | | | | | | | | | |
| | I-A | 93.33 | 95.56 | 69.72 | 81.33 | 95.83 | 93.33 | 88.89 | | |
| Patch | I-F | 76.92 | 89.28 | 83.33 | 84.51 | 91.52 | 89.65 | 89.23 | | |
| core | P-A | 98.81 | 98.84 | 97.17 | 98.63 | 96.88 | 98.53 | 97.17 | | |
| | P-F | 60.04 | 61.71 | 28.39 | 62.85 | 60.93 | 62.88 | 62.61 | | |
| | | | | | | | | | | |
| | I-A | 76.66 | 68.05 | 65.27 | 69.44 | 55.00 | 63.88 | 54.72 | | |
| STFPM | I-F | 83.33 | 83.33 | 83.33 | 83.33 | 76.19 | 83.33 | 85.71 | | |
| SIFFINI | P-A | 21.37 | 19.46 | 14.33 | 20.01 | 20.24 | 19.30 | 19.46 | | |
| | P-F | 2.99 | 3.00 | 3.01 | 3.01 | 3.00 | 3.01 | 3.01 | | |
| | | | | | | | | | | |
| | I-A | 78.89 | 89.44 | 70.27 | 60.83 | 64.16 | 66.11 | 91.67 | | |
| CFlow | I-F | 83.33 | 83.33 | 83.33 | 83.33 | 83.33 | 83.33 | 91.52 | | |
| CFIOW | P-A | 97.72 | 97.71 | 95.06 | 96.17 | 95.91 | 96.74 | 95.48 | | |
| | P-F | 7.79 | 7.62 | 6.74 | 6.85 | 39.48 | 35.00 | 43.33 | | |
| | | | | | | | | | | |
| DFM | I-A | 84.72 | 77.22 | 56.94 | 71.38 | 81.38 | 68.05 | 69.72 | | |
| Dilvi | I-F | 23.52 | 37.83 | 81.15 | 77.96 | 89.23 | 82.85 | 86.15 | | |
| | | T | | | | | | | | |
| DFKDE | I-A | 71.38 | 76.38 | 50.00 | 55.83 | 55.27 | 46.11 | 59.44 | | |
| DINDL | I-F | 33.33 | 51.16 | 83.33 | 83.33 | 84.50 | 83.33 | 83.33 | | |
| | | | | | | | | | | |
| | I-A | 100 | 100 | 91.39 | 99.17 | 100 | 98.61 | 85.89 | | |
| Ours | I-F | 100 | 100 | 83.33 | 88.24 | 100 | 83.33 | 83.33 | | |
| | P-A | 98.75 | 98.79 | 97.16 | 98.48 | 97.82 | 82.94 | 69.91 | | |
| | P-F | 55.29 | 56.00 | 49.52 | 50.57 | 53.14 | 46.05 | 43.55 | | |

Wide ResNet 50 Transistor

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | |
|---------|-----|-------|--------|--------|-------|--------|---------|--------|--|
| Padim | I-A | 99.49 | 99.25 | 98.75 | 99.58 | 99.21 | 98.83 | 98.87 | |
| | I-F | 90.41 | 92.10 | 89.18 | 85.71 | 87.32 | 90.66 | 88.89 | |
| | P-A | 95.68 | 96.04 | 97.56 | 98.04 | 97.41 | 97.40 | 96.54 | |
| | P-F | 57.49 | 57.00 | 56.49 | 57.20 | 60.05 | 63.50 | 62.80 | |
| | | | | | | | | | |
| | I-A | 99.58 | 99.04 | 91.37 | 99.16 | 97.29 | 93.62 | 93.29 | |
| Patch | I-F | 73.01 | 70.96 | 73.26 | 68.85 | 75.00 | 85.33 | 84.50 | |
| core | P-A | 97.48 | 97.02 | 93.15 | 96.75 | 94.06 | 90.12 | 90.97 | |
| | P-F | 46.62 | 49.44 | 47.80 | 49.47 | 53.15 | 49.31 | 52.13 | |
| | | | | | | | | | |
| | I-A | 60.70 | 62.54 | 61.62 | 70.91 | 62.00 | 60.29 | 65.99 | |
| STFPM | I-F | 47.61 | 56.81 | 67.30 | 56.41 | 62.22 | 63.15 | 63.82 | |
| SIFFINI | P-A | 79.61 | 78.99 | 80.68 | 77.17 | 78.76 | 78.35 | 78.44 | |
| | P-F | 22.24 | 23.95 | 25.81 | 23.19 | 31.33 | 35.88 | 39.80 | |
| | | | | | | | | | |
| | I-A | 79.08 | 83.54 | 65.08 | 79.37 | 85.25 | 80.58 | 76.67 | |
| CFlow | I-F | 55.07 | 64.34 | 58.18 | 60.50 | 60.93 | 63.24 | 60.46 | |
| CITOW | P-A | 89.42 | 88.19 | 77.31 | 88.96 | 88.53 | 87.99 | 87.73 | |
| | P-F | 38.14 | 44.45 | 30.06 | 44.34 | 43.04 | 45.11 | 43.78 | |
| | | | | | | | | | |
| DFM | I-A | 91.87 | 81.29 | 79.12 | 83.33 | 77.54 | 77.33 | 80.70 | |
| DITIVI | I-F | 22.22 | 29.78 | 57.55 | 29.78 | 62.68 | 65.82 | 74.66 | |
| | | Ī | | | | Ī | | | |
| DFKDE | I-A | 83.33 | 82.41 | 71.20 | 68.29 | 70.54 | 71.45 | 72.24 | |
| | I-F | 18.18 | 55.17 | 57.14 | 57.53 | 50.84 | 57.73 | 68.49 | |
| | | | | | | | | | |
| Ours | I-A | 95.55 | 99.63 | 97.71 | 99.00 | 99.21 | 98.71 | 98.92 | |
| | I-F | 91.90 | 94.08 | 87.34 | 87.62 | 91.00 | 92.50 | 96.64 | |
| | P-A | 98.20 | 98.82 | 97.98 | 98.47 | 97.80 | 97.78 | 96.88 | |
| | P-F | 65.65 | 66.32 | 69.20 | 67.65 | 70.24 | 73.51 | 72.36 | |

Wide ResNet 50 Wood

| Padim | | | | | I | | I | | | |
|--|---|-----|-------|--------|--------|-------|--------|---------|--------|-------|
| Padim P-A 94.85 93.37 92.85 90.56 93.77 92.18 92.71 | | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | |
| Padim P-A 94.85 93.37 92.85 90.56 93.77 92.18 92.71 P-F 47.65 45.55 39.48 40.93 45.74 43.61 44.38 Patch core I-A 99.73 98.59 97.71 94.38 98.85 98.77 98.50 P-A 93.40 91.29 90.24 85.17 91.02 89.07 90.09 P-F 41.11 36.55 23.25 31.44 39.59 37.87 39.00 STFPM I-A 99.47 98.94 98.68 98.94 99.21 99.29 98.68 I-F 98.30 96.72 94.30 93.80 96.55 97.43 97.43 P-A 97.17 96.15 95.12 93.28 96.10 95.66 96.05 P-F 61.29 44.77 20.93 45.94 56.34 53.46 56.23 CFlow I-F 95.16 91.60 86.33 | Padim | I-A | 99.38 | 98.85 | 98.15 | 97.89 | 98.94 | 99.21 | 99.47 | |
| P-A 94.85 93.37 92.85 90.56 93.77 92.18 92.71 P-F 47.65 45.55 39.48 40.93 45.74 43.61 44.38 P-A 99.73 98.59 97.71 94.38 98.85 98.77 98.50 | | I-F | 98.33 | 95.93 | 93.65 | 94.91 | 97.47 | 96.55 | 95.65 | |
| Patch core P-A 99.73 98.59 97.71 94.38 98.85 98.77 98.50 97.66 P-A 93.40 91.29 90.24 85.17 91.02 89.07 90.09 P-F 41.11 36.55 23.25 31.44 39.59 37.87 39.00 37.87 39.29 38.68 39.80 36.55 37.43 39.00 37.87 39.29 38.68 39.80 39.55 39.43 | | P-A | 94.85 | 93.37 | 92.85 | 90.56 | 93.77 | 92.18 | 92.71 | |
| Patch core P-A 93.40 91.29 90.24 85.17 91.02 89.07 90.09 | | P-F | 47.65 | 45.55 | 39.48 | 40.93 | 45.74 | 43.61 | 44.38 | |
| Patch core P-A 93.40 91.29 90.24 85.17 91.02 89.07 90.09 | | | | | | | | | | |
| P-A 93.40 91.29 90.24 85.17 91.02 89.07 90.09 P-F 41.11 36.55 23.25 31.44 39.59 37.87 39.00 R-F 41.11 36.55 23.25 31.44 39.59 37.87 39.00 R-F 41.11 36.55 23.25 31.44 39.59 37.87 39.00 R-F 98.30 96.72 94.30 93.80 96.55 97.43 97.43 P-A 97.17 96.15 95.12 93.28 96.10 95.66 96.05 P-F 61.29 44.77 20.93 45.94 56.34 53.46 56.23 R-F 95.16 91.60 86.33 87.40 93.54 95.16 95.23 R-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 R-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 R-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 R-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 R-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 R-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 R-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-A | 99.73 | 98.59 | 97.71 | 94.38 | 98.85 | 98.77 | 98.50 | |
| P-F | Patch | I-F | 96.72 | 94.48 | 86.33 | 86.76 | 95.08 | 95.16 | 97.56 | |
| I-A 99.47 98.94 98.68 98.94 99.21 99.29 98.68 98.94 99.21 99.29 98.68 98.94 99.21 99.29 98.68 98.94 99.21 99.29 98.68 98.94 99.21 99.29 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.44 97.17 96.15 95.12 93.28 96.10 95.66 96.05 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 97.43 97.44 | core | P-A | 93.40 | 91.29 | 90.24 | 85.17 | 91.02 | 89.07 | 90.09 | |
| STFPM I-F 98.30 96.72 94.30 93.80 96.55 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 96.05 98.28 96.05 96.75 83.07 91.31 94.82 98.24 96.67 P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 DFKDE I-F 85.71 86.33 86.33 85.50 | | P-F | 41.11 | 36.55 | 23.25 | 31.44 | 39.59 | 37.87 | 39.00 | |
| STFPM I-F 98.30 96.72 94.30 93.80 96.55 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 97.43 96.05 98.28 96.05 96.75 83.07 91.31 94.82 98.24 96.67 P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 DFKDE I-F 85.71 86.33 86.33 85.50 | | | | | | | | | | |
| STFPM P-A 97.17 96.15 95.12 93.28 96.10 95.66 96.05 P-F 61.29 44.77 20.93 45.94 56.34 53.46 56.23 FA I-A 98.33 96.75 83.07 91.31 94.82 98.24 96.67 P-A 91.60 86.33 87.40 93.54 95.16 95.23 P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 95.23 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 DFKDE I-A 84.47 51.09 <th col<="" td=""><td></td><td>I-A</td><td>99.47</td><td>98.94</td><td>98.68</td><td>98.94</td><td>99.21</td><td>99.29</td><td>98.68</td></th> | <td></td> <td>I-A</td> <td>99.47</td> <td>98.94</td> <td>98.68</td> <td>98.94</td> <td>99.21</td> <td>99.29</td> <td>98.68</td> | | I-A | 99.47 | 98.94 | 98.68 | 98.94 | 99.21 | 99.29 | 98.68 |
| P-A 97.17 96.15 95.12 93.28 96.10 95.66 96.05 P-F 61.29 44.77 20.93 45.94 56.34 53.46 56.23 I-A 98.33 96.75 83.07 91.31 94.82 98.24 96.67 -F 95.16 91.60 86.33 87.40 93.54 95.16 95.23 -A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 -F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 | | I-F | 98.30 | 96.72 | 94.30 | 93.80 | 96.55 | 97.43 | 97.43 | |
| The content of the co | STEPINI | P-A | 97.17 | 96.15 | 95.12 | 93.28 | 96.10 | 95.66 | 96.05 | |
| I-F 95.16 91.60 86.33 87.40 93.54 95.16 95.23 P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 I-B 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 Ours I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 <t< td=""><td></td><td>P-F</td><td>61.29</td><td>44.77</td><td>20.93</td><td>45.94</td><td>56.34</td><td>53.46</td><td>56.23</td></t<> | | P-F | 61.29 | 44.77 | 20.93 | 45.94 | 56.34 | 53.46 | 56.23 | |
| I-F 95.16 91.60 86.33 87.40 93.54 95.16 95.23 P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 I-B 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 Ours I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | |
| CFlow P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 Ours I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-A | 98.33 | 96.75 | 83.07 | 91.31 | 94.82 | 98.24 | 96.67 | |
| P-A 91.27 88.78 84.96 85.67 87.09 88.91 88.74 P-F 37.67 37.62 35.08 33.58 40.70 41.75 42.57 DFM I-A 99.47 88.50 65.17 79.51 91.66 88.50 92.19 I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-F | 95.16 | 91.60 | 86.33 | 87.40 | 93.54 | 95.16 | 95.23 | |
| DFM | CFIOW | P-A | 91.27 | 88.78 | 84.96 | 85.67 | 87.09 | 88.91 | 88.74 | |
| DFM I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 | | P-F | 37.67 | 37.62 | 35.08 | 33.58 | 40.70 | 41.75 | 42.57 | |
| DFM I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 | | | | | | | | | | |
| I-F 94.73 86.56 86.33 86.33 88.52 87.50 90.90 DFKDE I-A 84.47 51.09 50.00 44.03 72.19 68.42 72.28 I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | DFM | I-A | 99.47 | 88.50 | 65.17 | 79.51 | 91.66 | 88.50 | 92.19 | |
| DFKDE I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-F | 94.73 | 86.56 | 86.33 | 86.33 | 88.52 | 87.50 | 90.90 | |
| DFKDE I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | | | | | | | | | |
| I-F 85.71 86.33 86.33 85.50 87.40 86.13 87.40 Ours I-A 99.52 99.21 98.16 99.30 99.39 99.38 99.74 I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | DFKDE | I-A | 84.47 | 51.09 | 50.00 | 44.03 | 72.19 | 68.42 | 72.28 | |
| Ours I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-F | 85.71 | 86.33 | 86.33 | 85.50 | 87.40 | 86.13 | 87.40 | |
| Ours I-F 98.56 96.67 88.89 95.93 96.67 96.72 98.31 P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | | | | | | | | | |
| Ours P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | Ours | I-A | 99.52 | 99.21 | 98.16 | 99.30 | 99.39 | 99.38 | 99.74 | |
| P-A 94.14 89.07 89.98 86.68 88.67 88.09 87.94 | | I-F | 98.56 | 96.67 | 88.89 | 95.93 | 96.67 | 96.72 | 98.31 | |
| P-F 47.52 38.74 34.06 35.85 44.15 44.72 44.07 | | P-A | 94.14 | 89.07 | 89.98 | 86.68 | 88.67 | 88.09 | 87.94 | |
| | | P-F | 47.52 | 38.74 | 34.06 | 35.85 | 44.15 | 44.72 | 44.07 | |

Wide ResNet 50 Zipper

| | | Ori | Def. B | Gau. B | Drop | Gau. N | Poss. N | S.P. N | | |
|--------|-----|--------------|--------|--------------|-------|--------------|--------------|--------|--|--|
| Padim | I-A | 88.20 | 91.04 | 89.46 | 67.35 | 63.10 | 61.21 | 72.19 | | |
| | I-F | 94.35 | 94.02 | 88.14 | 88.14 | 88.14 | 88.14 | 88.14 | | |
| | P-A | 98.02 | 98.17 | 97.08 | 67.15 | 77.03 | 76.08 | 73.13 | | |
| | P-F | 54.61 | 48.40 | 4.67 | 7.48 | 7.55 | 5.27 | 5.55 | | |
| | | | | | | | | | | |
| | I-A | 95.77 | 94.30 | 87.55 | 68.27 | 63.05 | 85.71 | 66.99 | | |
| Patch | I-F | 97.11 | 89.13 | 88.14 | 88.14 | 88.14 | 88.14 | 88.14 | | |
| core | P-A | 98.33 | 97.63 | 94.10 | 71.25 | 85.14 | 93.10 | 82.98 | | |
| | P-F | 57.32 | 49.16 | 4.53 | 8.33 | 11.25 | 10.41 | 8.75 | | |
| | | | | | | | | | | |
| | I-A | 82.06 | 79.22 | 87.84 | 62.44 | 71.63 | 70.06 | 69.03 | | |
| CTEDNA | I-F | 91.49 | 89.92 | 88.14 | 88.14 | 88.14 | 88.14 | 88.14 | | |
| STFPM | P-A | 97.95 | 96.21 | 92.13 | 71.53 | 76.57 | 74.75 | 74.17 | | |
| | P-F | 57.31 | 29.14 | 4.80 | 8.49 | 7.43 | 5.22 | 5.59 | | |
| | | | | | | | | | | |
| | I-A | 92.09 | 91.99 | 68.85 | 66.07 | 13.44 | 27.62 | 26.05 | | |
| OF! | I-F | 92.24 | 93.38 | 81.51 | 88.14 | 88.14 | 88.14 | 88.14 | | |
| CFlow | P-A | 97.30 | 96.50 | 85.28 | 68.83 | 73.25 | 80.73 | 74.70 | | |
| | P-F | 47.94 | 42.89 | 13.06 | 6.21 | 8.39 | 11.90 | 9.02 | | |
| | | | | | | | | | | |
| DFM | I-A | 96.21 | 92.51 | 63.70 | 87.10 | 83.29 | 81.93 | 91.75 | | |
| | I-F | 1.67 | 3.30 | 88.14 | 89.13 | 88.80 | 88.88 | 91.37 | | |
| | | , | | , | | , | , | | | |
| DFKDE | I-A | 50.42 | 52.10 | 33.39 | 50.00 | 50.00 | 49.57 | 52.46 | | |
| | I-F | 1.67 | 1.67 | 77.72 | 88.14 | 88.14 | 88.14 | 88.14 | | |
| | | | | | | | | | | |
| Ours | I-A | 89.84 | 91.50 | 90.19 | 65.94 | 76.61 | 67.13 | 73.93 | | |
| | I-F | 94.43 | 94.75 | 88.15 | 88.15 | 88.15 | 88.15 | 88.15 | | |
| | P-A | 98.76 | 98.54 | 97.38 | 71.87 | 84.59 | 81.79 | 79.17 | | |
| | P-F | 54.06 | 47.50 | 4.33 | 8.68 | 17.19 | 6.50 | 7.40 | | |