**EfficientNetv2\_s,** training batch size=**128**, testing bs=**128,** optimizer=**SGD, lr=0.02**, **epoch=70**

+ RandomHorizontalFlip() + RandomCrop(32, padding=4)

OOD accuracy without the "unknown" label: Accuracy of the network: 50.18 %

testing openmax...

0 1 2 3 4 5 6

Accuracy of the network: 50.18 %

D:\Miniconda3\lib\site-packages\scipy\\_lib\deprecation.py:20: RuntimeWarning: overflow encountered in exp

return fun(\*args, \*\*kwargs)

E:\Projects\Github\pytorch-image-models\open-set-calibration\openmax\_edit\compute\_openmax.py:61: RuntimeWarning: invalid value encountered in true\_divide

prob\_scores += [channel\_scores / total\_denominator]

Accuracy of the network: 84.53333333333333 %

threshold is 0.00:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.820 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.05:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.820 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.10:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.820 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.15:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.820 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.20:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.830 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.25:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.850 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.30:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 50.980 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3668352047920227

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.13674227180480958

threshold is 0.35:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 51.120 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.36763688068389894

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.1376194019317627

threshold is 0.40:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 51.660 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3697863464295864

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.1641455936431885

threshold is 0.45:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 52.430 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.37183687514662744

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.17950717201232907

threshold is 0.50:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 53.660 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.37364505996108055

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.17847453346252443

threshold is 0.55:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 54.810 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.37478327521681787

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.1762400114655495

threshold is 0.60:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 55.760 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3715174011170864

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.17171175956726073

threshold is 0.65:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 56.960 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3693313613831997

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.16354373970031738

threshold is 0.70:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 58.020 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.36689300994277

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.15808032569885255

threshold is 0.75:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 59.180 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.36291497458815575

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.15390382614135742

threshold is 0.80:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 60.220 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3571319114625454

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.1519014072418213

threshold is 0.85:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 61.430 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.35129308671355247

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.15130628452301026

threshold is 0.90:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 62.570 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.34390230559706686

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.15117315397262573

threshold is 0.95:

Threshold accuracy openmax calibration: 50.82 %

Threshold accuracy: 63.600 %

Brier before calibration: 0.8405822806013024

ECE before calibration: 0.3336476087510586

calibrating...

Brier temperature\_scaling calibration: 0.7190747984165364

ECE temperature\_scaling calibration: 0.15117955686077475