The paper we chose is "Spectral Leakage and Rethinking the Kernel Size in CNNs".

The authors claimed that the small size of CNN kernels make them susceptible to spectral leakage, which may induce performance-degrading artifacts. And in order to address the issue, they proposed the use of larger kernel sizes along with the Hamming window function to alleviate leakage in CNN architectures. And the performed their classification on Fashion-MNIST, CIFAR-10, CIFAR-100, and ImageNet with the simple use of a standard window function in convolutional layers. And they also showed that CNNs employing the Hamming window display increased robustness against various adversarial attacks.

https://arxiv.org/abs/2101.10143#:~:text=Convolutional%20layers%20in%20CNNs%20implement,input%20into%20different%20frequency%20bands.&text=We%20show%20that%20the%20small,may%20induce%20performance%2Ddegrading%20artifacts.