Model	Testing Diffusion Generators								Total
	ADM	DDPM	IDDPM	LDM	PNDM	SDV1	SDV2	VQDM	Avg.
CNNSplot [39]	100	99.6	100	99.1	85.8	98.2	99.9	96.1	97.3
F3Net [29]	99.6	99.6	99.9	99.2	95.3	91.7	97.8	98.7	97.7
DIRE [40]	100	100	100	100	100	100	100	100	100
Ours	100	99.4	100	99.9	99.9	100	99.9	100	99.9

Table 4. Comparisons of AP on DiffusionForensics [40] Dataset.

Necessity of diffusion-generated image detection: Diffusion-generated image detection, a subset of forgery detection, has unique features that necessitate special attention. The creation process leaves specific artifacts [1, 2, 6] requiring specialized detection methods. The prevalence and realism of these images have increased due to the development of diffusion models [3, 5], presenting new challenges [4]. Focusing on this task improves our understanding of various image forgeries.

More theoretical analysis on the difference between fakes and reals: Generated images have a higher posterior probability after being sampled from the generative model, making them more easily reconstructed by the model. The observed phenomenon is generalizable, as evidenced across eight GenImage [8] benchmark models.

Experiments on DiffusionForensics: In Tab. 4, we present the results on the DiffusionForensics [6] Dataset. Following DIRE [6], we train our model on LSUN-B [7]. The fake images are generated by ADM [3]. Both our method and DIRE exhibit performance advantage over existing methods. Notably, our method not only matches DIRE in terms of effectiveness but also outperforms it in efficiency, which is **8x** faster. This clearly underscores the superior efficacy and efficiency of our approach.

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